

=> D HIS L26-

(FILE 'HCAPLUS' ENTERED AT 11:14:33 ON 30 AUG 2002)

FILE 'REGISTRY' ENTERED AT 11:18:29 ON 30 AUG 2002

L26 FILE 'HCAPLUS' ENTERED AT 11:18:35 ON 30 AUG 2002  
5 S SUMMER P?/AU

L27 FILE 'WPIX' ENTERED AT 11:32:15 ON 30 AUG 2002  
1 S L26

FILE 'STNGUIDE' ENTERED AT 11:32:39 ON 30 AUG 2002

L28 FILE 'REGISTRY' ENTERED AT 11:37:08 ON 30 AUG 2002  
E GLUTAMIC ACID/CN  
2 S E3  
E PHOSPHORIC ACID/CN

L29 1 S E3

L30 3 S MAGNESIUM OXIDE/CN OR CALCIUM OXIDE/CN OR ALUMINUM OXIDE/CN

FILE 'HCAPLUS' ENTERED AT 11:39:27 ON 30 AUG 2002

L31 85117 S L28 OR GLUTAMIC ACID

L32 72538 S L29 OR PHOSPHORIC ACID

L33 119692 S L32 OR H3PO4

L34 537292 S L30 OR (MAGNESIUM OR ALUMINUM OR ALUMINIUM OR MAGNESIUM OR CA

L35 27 S L31 AND L33 AND L34

L36 4 S L35 AND FEED?/SC, SX

L37 3 S L35 AND FEED?

L38 4 S L36 OR L37

L39 FILE 'WPIX' ENTERED AT 11:49:17 ON 30 AUG 2002  
1 S L38

L40 FILE 'AGRICOLA' ENTERED AT 11:50:16 ON 30 AUG 2002  
0 S L37

L41 FILE 'CABA' ENTERED AT 11:50:50 ON 30 AUG 2002  
0 S L37

L42 FILE 'BIOSIS' ENTERED AT 11:51:08 ON 30 AUG 2002  
0 S L37

L43 FILE 'MEDLINE' ENTERED AT 11:51:55 ON 30 AUG 2002  
0 S L37

FILE 'STNGUIDE' ENTERED AT 11:52:09 ON 30 AUG 2002

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 11:55:19 ON 30 AUG 2002

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*nothing in  
Agricola  
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specific*

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FILE COVERS 1907 - 30 Aug 2002 VOL 137 ISS 10  
FILE LAST UPDATED: 29 Aug 2002 (20020829/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> D QUE L38

L28 2 SEA FILE=REGISTRY ABB=ON "GLUTAMIC ACID"/CN  
L29 1 SEA FILE=REGISTRY ABB=ON "PHOSPHORIC ACID"/CN  
L30 3 SEA FILE=REGISTRY ABB=ON MAGNESIUM OXIDE/CN OR CALCIUM  
OXIDE/CN OR ALUMINUM OXIDE/CN  
L31 85117 SEA FILE=HCAPLUS ABB=ON L28 OR GLUTAMIC ACID  
L32 72538 SEA FILE=HCAPLUS ABB=ON L29 OR PHOSPHORIC ACID  
L33 119692 SEA FILE=HCAPLUS ABB=ON L32 OR H3PO4  
L34 537292 SEA FILE=HCAPLUS ABB=ON L30 OR (MAGNESIUM OR ALUMINUM OR  
ALUMINIUM OR MAGNESIUM OR CALCIUM) (W)OXIDE# OR MGO OR AL2O3 OR  
CAO  
L35 27 SEA FILE=HCAPLUS ABB=ON L31 AND L33 AND L34  
L36 4 SEA FILE=HCAPLUS ABB=ON L35 AND FEED?/SC, SX  
L37 3 SEA FILE=HCAPLUS ABB=ON L35 AND FEED?  
L38 4 SEA FILE=HCAPLUS ABB=ON L36 OR L37

=> D L38 ALL 1-4 HITSTR

L38 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2002 ACS  
AN 2002:555965 HCAPLUS  
DN 137:108652  
TI Phosphorus-containing coating materials for flowable cottonseed  
IN Summer, Paul; Yamamoto, Koryu  
PA Ajinomoto U.S.A., Inc., USA  
SO U.S. Pat. Appl. Publ., 6 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
IC ICM A23K001-18  
NCL 424438000  
CC 17-12 (Food and **Feed** Chemistry)  
FAN.CNT 1

*applicants*

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002098226	A1	20020725	US 2001-768623	20010125
AB	A method for the prepn. of a handleable, flowable coated cottonseed product is provided which involves coating cottonseed with a compn. of (a) water or a liq. <b>feed</b> product, (b) a sol. phosphorous source and (c) a metal compd. capable of interacting with the sol. phosphorous source to form a coating on the cottonseed, and curing the coating. The flowable cottonseed product formed is used as a <b>feed</b> supplement for ruminants such as cattle, as a plantable source of cottonseed, and in a method for treatment and(or) prevention of urinary calculi or prevention				

of milk fever in cattle. Thus, cottonseed (1080 lbs) is thoroughly mixed with 80 lbs of calcium carbonate to coat the cottonseed with the calcium carbonate. A soln. is then formed by combining 500 lbs of Proteferm (condensed glutamic acid fermn. solubles), 140 lbs of 75% aqueous phosphoric acid and 200 lbs of sodium bentonite. The resulting soln. is then combined with the calcium carbonate-coated cottonseed to coat the cottonseed with the Proteferm-contg. soln. The coating thus formed is allowed to cure and harden at ambient temp. to provide 2000 lbs of coated cottonseed. Batches of coated cottonseed using the same percentages of components, but on a smaller scale resulted in a final coated cottonseed product that was flowable and easily handleable with conventional grain handling equipment.

- ST cottonseed flowability coating material phosphorus
- IT Fermentation
  - (condensed solubles; phosphorus-contg. coating materials for flowable cottonseed)
- IT Industrial liquors
  - (corn steep liquor; phosphorus-contg. coating materials for flowable cottonseed)
- IT Yeast
  - (distillers', paste; phosphorus-contg. coating materials for flowable cottonseed)
- IT Fungicides
  - (mold inhibitors; phosphorus-contg. coating materials for flowable cottonseed)
- IT Paralysis
  - (parturient, prevention of; phosphorus-contg. coating materials for flowable cottonseed)
- IT Alkali metal compounds
  - Alkaline earth compounds
  - RL: FFD (Food or feed use); NUU (Other use, unclassified); BIOL (Biological study); USES (Uses)
  - (phosphates and phosphonates; phosphorus-contg. coating materials for flowable cottonseed)
- IT Calculi, urinary
  - Coating materials
  - Cottonseed
  - Feed**
  - Molasses
  - Whey
    - (phosphorus-contg. coating materials for flowable cottonseed)
- IT Amino acids, biological studies
  - Enzymes, biological studies
  - Mineral elements, biological studies
  - Vitamins
  - RL: FFD (Food or feed use); NUU (Other use, unclassified); BIOL (Biological study); USES (Uses)
  - (phosphorus-contg. coating materials for flowable cottonseed)
- IT Intestinal bacteria
  - (probiotic, direct fed microbials; phosphorus-contg. coating materials for flowable cottonseed)
- IT Distillery slops
  - (solubles yeast paste; phosphorus-contg. coating materials for flowable cottonseed)
- IT Cattle
  - (urinary calculi prevention in; phosphorus-contg. coating materials for flowable cottonseed)
- IT Sorbents
  - (water; phosphorus-contg. coating materials for flowable cottonseed)
- IT 7723-14-0, Phosphorus, biological studies

RL: FFD (Food or feed use); NUU (Other use, unclassified); BIOL (Biological study); USES (Uses)  
(coating materials for flowable cottonseed)

IT 56-86-0, **Glutamic acid**, biological studies  
RL: FFD (Food or feed use); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fermn. solubles; phosphorus-contg. coating materials for flowable cottonseed)

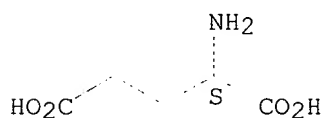
IT 62-54-4, Calcium acetate 471-34-1, Calcium carbonate, biological studies 1305-62-0, Calcium hydroxide, biological studies **1305-78-8, Calcium oxide**, biological studies 1309-42-8, Magnesium hydroxide **1309-48-4, Magnesium oxide**, biological studies **1344-28-1, Aluminum oxide**, biological studies 4075-81-4, Calcium propionate 7429-90-5, Aluminum, biological studies 7439-95-4, Magnesium, biological studies 7440-70-2, Calcium, biological studies 7487-88-9, Magnesium sulfate, biological studies **7664-38-2, Phosphoric acid**, biological studies 7722-76-1, Monoammonium phosphate 7778-18-9, Calcium sulfate 7783-28-0, Diammonium phosphate 7786-30-3, Magnesium chloride, biological studies 10043-52-4, Calcium chloride, biological studies 13598-36-2, Phosphorous acid, biological studies 14265-44-2, Phosphate, biological studies  
RL: FFD (Food or feed use); NUU (Other use, unclassified); BIOL (Biological study); USES (Uses)  
(phosphorus-contg. coating materials for flowable cottonseed)

IT 443648-21-3, Proteferm  
RL: FFD (Food or feed use); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(phosphorus-contg. coating materials for flowable cottonseed)

IT 56-86-0, **Glutamic acid**, biological studies  
RL: FFD (Food or feed use); NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(fermn. solubles; phosphorus-contg. coating materials for flowable cottonseed)

RN 56-86-0 HCAPLUS  
CN L-Glutamic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.



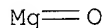
IT 1305-78-8, **Calcium oxide**, biological studies  
1309-48-4, **Magnesium oxide**, biological studies  
1344-28-1, **Aluminum oxide**, biological studies  
7664-38-2, **Phosphoric acid**, biological studies  
RL: FFD (Food or feed use); NUU (Other use, unclassified); BIOL (Biological study); USES (Uses)  
(phosphorus-contg. coating materials for flowable cottonseed)

RN 1305-78-8 HCAPLUS  
CN Calcium oxide (CaO) (9CI) (CA INDEX NAME)

Ca=O

RN 1309-48-4 HCAPLUS

CN Magnesium oxide (MgO) (9CI) (CA INDEX NAME)



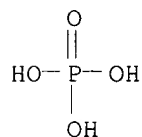
RN 1344-28-1 HCAPLUS

CN Aluminum oxide (Al<sub>2</sub>O<sub>3</sub>) (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 7664-38-2 HCAPLUS

CN Phosphoric acid (7CI, 8CI, 9CI) (CA INDEX NAME)



L38 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:338295 HCAPLUS

DN 134:325508

TI Compositions and methods for calcium fortification of dairy products and oleaginous foods

IN Christensen, Earl C.; Ashmead, Stephen D.; Ericson, Clayton

PA Albion International, Inc., USA

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A23L001-304

ICS A23L001-305

CC 17-6 (Food and Feed Chemistry)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001032037	A1	20010510	WO 2000-US30182	20001101
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6294207	B1	20010925	US 1999-431387	19991101
	US 6299914	B1	20011009	US 1999-430926	19991101
	BR 2000015182	A	20020716	BR 2000-15182	20001101
PRAI	US 1999-430926	A	19991101		
	US 1999-431387	A	19991101		
	WO 2000-US30182	W	20001101		
AB	Calcium amino acid chelate complexes for fortification of dairy products and oleaginous foods, dairy products and oleaginous foods fortified with calcium amino acid chelate complexes, and methods of prepg. calcium amino acid chelate complexes are disclosed and described. Addnl., calcium amino acid malic acid chelate complexes for fortification of oleaginous foods				

are also disclosed. The calcium amino acid chelate complexes and calcium amino acid malic acid chelate complexes of the present invention are stable, palatable, and bioavailable. The calcium amino acid chelate complexes are prepd. by reacting a calcium compd., an amino acid ligand, a pH adjuster, and, optionally, a stabilizing/suspending agent in an aq. environment. The calcium amino acid malic acid chelate complexes are prepd. by reacting a calcium source, an amino acid ligand, and malic acid in an aq. environment.

ST dairy product calcium amino acid chelate supplement

IT Monoglycerides

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(citric acid esters; compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Butter

Cheese

Cream

Dairy products

Emulsifying agents

Ice cream

Margarine

Milk

Milk preparations

(compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Diglycerides

Fats and Glyceridic oils, biological studies

Lard

Lecithins

Monoglycerides

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Amino acids, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)  
(compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Dipeptides

RL: RCT (Reactant); RACT (Reactant or reagent)  
(compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Tripeptides

RL: RCT (Reactant); RACT (Reactant or reagent)  
(compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Food

(fatty; compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Hydrocolloids

(gums; compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Ice cream

(low-calorie; compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Food

(oleaginous; compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Cheese

(process; compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Cream

(sour; compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Food  
(spreads; compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Peptides, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(tetrapeptides; compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT Frozen foods  
Milk preparations  
(yogurt; compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT 50-21-5, Lactic acid, biological studies 64-19-7, Acetic acid, biological studies 77-92-9, Citric acid, biological studies 6915-15-7, Malic acid 7440-70-2, Calcium, biological studies **7664-38-2**, **Phosphoric acid**, biological studies 9000-01-5, Gum arabic 9000-07-1, Carrageenan 9000-30-0, Guar gum 9050-04-8, Calcium CM-cellulose 25383-99-7, Sodium stearyl lactylate  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT 7440-70-2D, Calcium, compds. and amino acid chelates, biological studies  
RL: FFD (Food or feed use); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
(compns. and methods for calcium fortification of dairy products and oleaginous foods)

IT 51-35-4, Hydroxyproline 52-90-4, L-Cysteine, reactions 56-40-6, Glycine, reactions 56-41-7, L-Alanine, reactions 56-45-1, L-Serine, reactions 56-84-8, L-Aspartic acid, reactions 56-85-9, L-Glutamine, reactions **56-86-0**, **L-Glutamic acid**, reactions 56-87-1, L-Lysine, reactions 56-89-3, Cystine, reactions 60-18-4, L-Tyrosine, reactions 61-90-5, L-Leucine, reactions 63-68-3, L-Methionine, reactions 63-91-2, L-Phenylalanine, reactions 70-26-8, L-Ornithine 70-47-3, L-Asparagine, reactions 71-00-1, L-Histidine, reactions 72-18-4, L-Valine, reactions 72-19-5, L-Threonine, reactions 73-22-3, L-Tryptophan, reactions 73-32-5, L-Isoleucine, reactions 74-79-3, L-Arginine, reactions 147-85-3, L-Proline, reactions 471-34-1, Calcium carbonate, reactions **1305-78-8**, **Calcium oxide**, reactions 10043-52-4, Calcium chloride, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(compns. and methods for calcium fortification of dairy products and oleaginous foods)

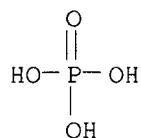
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE  
(1) Hsu; US 5504055 A 1996 HCAPLUS  
(2) Mulchandani; US 5700513 A 1997 HCAPLUS  
(3) Pedersen; US 5516925 A 1996 HCAPLUS  
(4) Serfontein; UK 2299992 A 1996  
(5) Turk; WO 9814173 A 1998 HCAPLUS

IT **7664-38-2**, **Phosphoric acid**, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(compns. and methods for calcium fortification of dairy products and oleaginous foods)

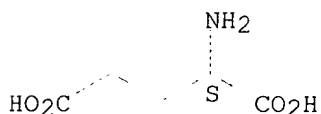
RN 7664-38-2 HCAPLUS

CN Phosphoric acid (7CI, 8CI, 9CI) (CA INDEX NAME)



IT 56-86-0, L-Glutamic acid, reactions  
 1305-78-8, Calcium oxide, reactions  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (compsn. and methods for calcium fortification of dairy products and  
 oleaginous foods)  
 RN 56-86-0 HCAPLUS  
 CN L-Glutamic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 1305-78-8 HCAPLUS  
 CN Calcium oxide (CaO) (9CI) (CA INDEX NAME)

Ca=O

L38 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2002 ACS  
 AN 1999:579493 HCAPLUS  
 DN 131:184262  
 TI Ruminant **feed** additive composition and process for producing the  
 same  
 IN Takemoto, Tadashi; Kitamura, Nobuyoshi; Kato, Toshihisa; Oshimura,  
 Masahiko; Mori, Ken-ichi  
 PA Ajinomoto Co., Inc., Japan  
 SO Eur. Pat. Appl., 25 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM A23K001-00  
 ICS A23K001-16; A23K001-18  
 CC 17-12 (Food and **Feed** Chemistry)  
 Section cross-reference(s): 18  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 940088	A2	19990908	EP 1999-301606	19990303
EP 940088	A3	19991215		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 11243871	A2	19990914	JP 1998-51968	19980304
JP 11346670	A2	19991221	JP 1998-155605	19980604
JP 2000060440	A2	20000229	JP 1998-233075	19980819
US 6238727	B1	20010529	US 1999-261226	19990303
PRAI JP 1998-51968	A	19980304		



JP 1998-155605 A 19980604  
 JP 1998-233075 A 19980819

AB Disclosed herein are a ruminant **feed** additive compn. contg. (a) lysine magnesium phosphate, (b) **magnesium oxide**, (c) a binder and (d) water, said water content being between 5 and 15% by wt., and a process for producing the same. In such ruminant **feed** additive compn. the physiol. active substance is fully protected in the rumen and rapidly dissolved in the abomasum, and which can easily be granulated by an extrusion-granulating method and the like. Disclosed herein is also a process for producing a ruminant **feed** additive compn., which comprises mixing the ingredients and extrusion granulation, optionally coating the resulting granules with a rumen-protective substance.

ST ruminant **feed** additive lysine magnesium

IT Stomach content, ruminant  
 (abomasal, model; ruminant **feed** additive compn. and process for producing the same)

IT Biological transport  
 (extrusion, granulation; ruminant **feed** additive compn. and process for producing the same)

IT Granulation  
 (extrusion-; ruminant **feed** additive compn. and process for producing the same)

IT Coating process  
 (extrusion; ruminant **feed** additive compn. and process for producing the same)

IT Temperature effects, biological  
 (heat; ruminant **feed** additive compn. and process for producing the same)

IT Soybean oil  
 RL: AGR (Agricultural use); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (hydrogenated; ruminant **feed** additive compn. and process for producing the same)

IT Tallow  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (hydrogenated; ruminant **feed** additive compn. and process for producing the same)

IT Stomach content, ruminant  
 (model; ruminant **feed** additive compn. and process for producing the same)

IT Binders  
 Cattle  
 Coating materials  
 Drying  
**Feed** additives  
 Pressure  
 Ruminant  
 Steam  
 (ruminant **feed** additive compn. and process for producing the same)

IT Amino acids, biological studies  
 Carnauba wax  
 Lecithins  
 Palm oil  
 RL: AGR (Agricultural use); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (ruminant **feed** additive compn. and process for producing the same)

IT 56-41-7, L-Alanine, biological studies 56-86-0, L-

**Glutamic acid**, biological studies 56-87-1D, L-Lysine, composite hydrate salt crystals with **phosphoric acid** and magnesium, biological studies 57-11-4, Octadecanoic acid, biological studies 59-51-8, Methionine **1309-48-4, Magnesium oxide**, biological studies 7439-95-4D, Magnesium, composite hydrate salt crystals with magnesium and lysine, biological studies 7439-95-4D, Magnesium, composite hydrate salt crystals with **phosphoric acid** and lysine, biological studies 7631-86-9, Silica, biological studies 9004-32-4, Sodium CM-cellulose 9004-57-3, Ethyl cellulose 10098-89-2, Lysine hydrochloride 14807-96-6, Talc, biological studies  
 RL: AGR (Agricultural use); FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(ruminant **feed** additive compn. and process for producing the same)

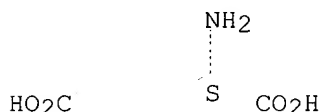
IT 56-86-0, L-Glutamic acid, biological studies **1309-48-4, Magnesium oxide**, biological studies  
 RL: AGR (Agricultural use); FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(ruminant **feed** additive compn. and process for producing the same)

RN 56-86-0 HCAPLUS

CN L-Glutamic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 1309-48-4 HCAPLUS

CN Magnesium oxide (MgO) (9CI) (CA INDEX NAME)

Mg=O

L38 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2002 ACS

AN 1991:80324 HCAPLUS

DN 114:80324

TI High-purity amino acid concentrates for foods, **feeds** or pharmaceuticals manufactured by hydrolysis of animal protein wastes

IN Colon Auria, Jose Cristobal

PA Proalan S. A., Spain

SO Span., 5 pp.

CODEN: SPXXAD

DT Patent

LA Spanish

IC ICM C08H001-00

CC 17-13 (Food and **Feed** Chemistry)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	ES 2008625	A6	19890716	ES 1988-3034	19881006
AB	Sol. high-purity amino acid concs., usable in foods, <b>feeds</b> or pharmaceuticals are manufd. by hydrolysis of protein animal wastes, such				

as feathers. The wastes are hydrolyzed with HCl, H<sub>2</sub>SO<sub>4</sub> or H<sub>3</sub>PO<sub>4</sub>, followed by neutralization to pH >3 with Na<sub>2</sub>CO<sub>3</sub>, CaCO<sub>3</sub> or CaO, filtration, purifn. of the filtrate with activated C and/or ion-exchange resins, concn. in vacuum, sterilization, and spray drying.

ST amino acid protein hydrolysis acid

IT Feed

Food

Pharmaceuticals

(amino acid concs. for, from hydrolysis of animal wastes)

IT Feather

(amino acid concs. prepd. by hydrolysis of)

IT Amino acids, preparation

RL: PREP (Preparation)

(concs., from hydrolysis of animal wastes)

IT Wastes

(animal, amino acid concs. by hydrolysis of)

IT 52-90-4, Cysteine, uses and miscellaneous 56-40-6, Glycine, uses and miscellaneous 56-41-7, Alanine, uses and miscellaneous 56-45-1, Serine, uses and miscellaneous 56-84-8, Aspartic acid, uses and miscellaneous 56-86-0, Glutamic acid, uses

and miscellaneous 56-87-1, Lysine, uses and miscellaneous 60-18-4,

Tyrosine, uses and miscellaneous 61-90-5, Leucine, uses and

miscellaneous 63-68-3, Methionine, uses and miscellaneous 63-91-2,

Phenylalanine, uses and miscellaneous 71-00-1, Histidine, uses and

miscellaneous 72-18-4, Valine, uses and miscellaneous 72-19-5,

Threonine, uses and miscellaneous 73-22-3, Tryptophan, uses and

miscellaneous 73-32-5, Isoleucine, uses and miscellaneous 74-79-3,

Arginine, uses and miscellaneous 147-85-3, Proline, uses and

miscellaneous

RL: USES (Uses)

(amino acid concs. contg., from hydrolysis of animal wastes)

IT 56-86-0, Glutamic acid, uses and miscellaneous

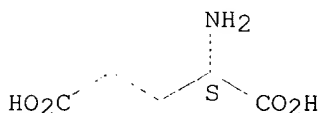
RL: USES (Uses)

(amino acid concs. contg., from hydrolysis of animal wastes)

RN 56-86-0 HCAPLUS

CN L-Glutamic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> FILE WPIX

FILE 'WPIX' ENTERED AT 11:55:53 ON 30 AUG 2002

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FILE LAST UPDATED: 29 AUG 2002

<20020829/UP>

MOST RECENT DERWENT UPDATE

200255

<200255/DW>

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> SLART (Simultaneous Left and Right Truncation) is now available in the /ABEX field. An additional search field /BIX is also provided which comprises both /BI and /ABEX <<<

>>> The BATCH option for structure searches has been

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enabled in WPINDEX/WPIDS and WPIX <<<

>>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES,  
SEE <http://www.derwent.com/dwpi/updates/dwpicov/index.html> <<<

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,  
PLEASE VISIT:  
[http://www.stn-international.de/training\\_center/patents/stn\\_guide.pdf](http://www.stn-international.de/training_center/patents/stn_guide.pdf) <<<

>>> FOR INFORMATION ON ALL DERWENT WORLD PATENTS INDEX USER  
GUIDES, PLEASE VISIT:  
[http://www.derwent.com/userguides/dwpi\\_guide.html](http://www.derwent.com/userguides/dwpi_guide.html) <<<

=> D QUE L39

L28 2 SEA FILE=REGISTRY ABB=ON "GLUTAMIC ACID"/CN  
L29 1 SEA FILE=REGISTRY ABB=ON "PHOSPHORIC ACID"/CN  
L30 3 SEA FILE=REGISTRY ABB=ON MAGNESIUM OXIDE/CN OR CALCIUM  
OXIDE/CN OR ALUMINUM OXIDE/CN  
L31 85117 SEA FILE=HCAPLUS ABB=ON L28 OR GLUTAMIC ACID  
L32 72538 SEA FILE=HCAPLUS ABB=ON L29 OR PHOSPHORIC ACID  
L33 119692 SEA FILE=HCAPLUS ABB=ON L32 OR H3PO4  
L34 537292 SEA FILE=HCAPLUS ABB=ON L30 OR (MAGNESIUM OR ALUMINUM OR  
ALUMINIUM OR MAGNESIUM OR CALCIUM) (W) OXIDE# OR MGO OR AL2O3 OR  
CAO  
L35 27 SEA FILE=HCAPLUS ABB=ON L31 AND L33 AND L34  
L36 4 SEA FILE=HCAPLUS ABB=ON L35 AND FEED?/SC, SX  
L37 3 SEA FILE=HCAPLUS ABB=ON L35 AND FEED?  
L39 1 SEA FILE=WPIX ABB=ON L36 OR L37

=> D L39 ALL

L39 ANSWER 1 OF 1 WPIX (C) 2002 THOMSON DERWENT  
AN 2001-566014 [64] WPIX  
DNC C2001-168060  
TI Process for clarifying fermented gourmet powder liquid.  
DC D13 D16  
IN ZHAO, Y  
PA (UYNA-N) UNIV NANJING  
CYC 1  
PI CN 1302558 A 20010711 (200164)\* A23L001-228  
ADT CN 1302558 A CN 2001-108019 20010105  
PRAI CN 2001-108019 20010105  
IC ICM A23L001-228  
ICS A23L001-277  
AB CN 1302558 A UPAB: 20011105  
NOVELTY - A method for clarifying the gourmet powder fermented fluid  
includes the following steps, A) adding a certain quantity of Ca(OH)<sub>2</sub> or  
CaO into the gourmet powder fermented fluid to agitate them to be  
dissolved fully in the fluid; B) adding H<sub>3</sub>PO<sub>4</sub> by dripping while  
agitating the fluid; C) after a short time of stagnation, filtering it to  
obtain the charified fermented fluid which has a transparence of is  
greater than or equal to 300 mm, washing the filter cake to get the filter  
cake as a feed protein and the washing water containing the  
glutamic acid to be returned to the process.  
Dwg.0/0  
FS CPI  
FA AB

MC CPI: D03-G; D05-A

*Broadened  
Search*

=> FILE HCAPLUS

FILE 'HCAPLUS' ENTERED AT 12:26:52 ON 30 AUG 2002  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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FILE COVERS 1907 - 30 Aug 2002 VOL 137 ISS 10  
FILE LAST UPDATED: 29 Aug 2002 (20020829/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> D QUE L89

L28 2 SEA FILE=REGISTRY ABB=ON "GLUTAMIC ACID"/CN  
L29 1 SEA FILE=REGISTRY ABB=ON "PHOSPHORIC ACID"/CN  
L30 3 SEA FILE=REGISTRY ABB=ON MAGNESIUM OXIDE/CN OR CALCIUM  
OXIDE/CN OR ALUMINUM OXIDE/CN  
L31 85117 SEA FILE=HCAPLUS ABB=ON L28 OR GLUTAMIC ACID  
L32 72538 SEA FILE=HCAPLUS ABB=ON L29 OR PHOSPHORIC ACID  
L33 119692 SEA FILE=HCAPLUS ABB=ON L32 OR H3PO4  
L34 537292 SEA FILE=HCAPLUS ABB=ON L30 OR (MAGNESIUM OR ALUMINUM OR  
ALUMINIUM OR MAGNESIUM OR CALCIUM) (W) OXIDE# OR MGO OR AL2O3 OR  
CAO  
L35 27 SEA FILE=HCAPLUS ABB=ON L31 AND L33 AND L34  
L36 4 SEA FILE=HCAPLUS ABB=ON L35 AND FEED?/SC, SX  
L37 3 SEA FILE=HCAPLUS ABB=ON L35 AND FEED?  
L38 4 SEA FILE=HCAPLUS ABB=ON L36 OR L37  
L44 123369 SEA FILE=HCAPLUS ABB=ON L31 OR CORN? (3A) LIQ? OR (YEAST? OR  
FERMENT) (3A) SOLUB? OR WHEY OR MOLASSES  
L45 1 SEA FILE=REGISTRY ABB=ON 13598-36-2/RN  
L46 5066 SEA FILE=HCAPLUS ABB=ON L45  
L47 1 SEA FILE=REGISTRY ABB=ON 7783-28-0/RN  
L48 4804 SEA FILE=HCAPLUS ABB=ON L47  
L49 1 SEA FILE=REGISTRY ABB=ON 7722-76-1/RN  
L50 5120 SEA FILE=HCAPLUS ABB=ON L49  
L51 564073 SEA FILE=HCAPLUS ABB=ON L32 OR L50 OR L48 OR L46 OR PHOSPHORUS  
ACID OR PHOSPHATE? OR PHOSPHONATE?  
L52 722452 SEA FILE=HCAPLUS ABB=ON L34 OR CACL OR CaCO3 OR CASO4 OR  
"CA(OH)2" OR MGCL OR MG2SO4 OR MFOH OR (CALCIUM OR MAGNESIUM) (W  
) (CHLORIDE OR SULFATE OR SULPHATE OR ACETATE OR PROPIONATE OR  
CARBONATE OR HYDROXIDE)

L53	769665	SEA FILE=HCAPLUS ABB=ON	L52 OR MGCL2 OR MGSO4 OR "MG(OH)2"
L64	1	SEA FILE=REGISTRY ABB=ON	10043-52-4/RN
L65	28671	SEA FILE=HCAPLUS ABB=ON	L64
L66	1	SEA FILE=REGISTRY ABB=ON	7786-30-3/RN
L67	21464	SEA FILE=HCAPLUS ABB=ON	L66
L68	1	SEA FILE=REGISTRY ABB=ON	7778-18-9/RN
L69	10527	SEA FILE=HCAPLUS ABB=ON	L68
L70	1	SEA FILE=REGISTRY ABB=ON	7487-88-9/RN
L71	11608	SEA FILE=HCAPLUS ABB=ON	L70
L72	1	SEA FILE=REGISTRY ABB=ON	4075-81-4/RN
L73	481	SEA FILE=HCAPLUS ABB=ON	L72
L74	1	SEA FILE=REGISTRY ABB=ON	1309-42-8/RN
L75	10457	SEA FILE=HCAPLUS ABB=ON	L74
L76	1	SEA FILE=REGISTRY ABB=ON	1305-62-0/RN
L77	20976	SEA FILE=HCAPLUS ABB=ON	L76
L78	1	SEA FILE=REGISTRY ABB=ON	471-34-1/RN
L79	46750	SEA FILE=HCAPLUS ABB=ON	L78
L80	1	SEA FILE=REGISTRY ABB=ON	62-54-4/RN
L81	2709	SEA FILE=HCAPLUS ABB=ON	L80
L82	783131	SEA FILE=HCAPLUS ABB=ON	L53 OR L81 OR L79 OR L77 OR L75 OR L73 OR L71 OR L69 OR L67 OR L65
L83	837	SEA FILE=HCAPLUS ABB=ON	L44 AND L51 AND L82
L84	218	SEA FILE=HCAPLUS ABB=ON	L83 AND FEED?/SC, SX, AB, BI
L85	8	SEA FILE=HCAPLUS ABB=ON	L84 AND (COTTONSEED# OR COTTON SEED#)
L86	14	SEA FILE=HCAPLUS ABB=ON	L84 AND SEED#
L87	3	SEA FILE=HCAPLUS ABB=ON	L83 AND (CALCULI OR CALCULUS OR MILK FEVER)
L88	22	SEA FILE=HCAPLUS ABB=ON	(L85 OR L86 OR L87)
L89	21	SEA FILE=HCAPLUS ABB=ON	L88 NOT L38

=> FILE WPIX

FILE 'WPIX' ENTERED AT 12:27:07 ON 30 AUG 2002  
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FILE LAST UPDATED: 29 AUG 2002 <20020829/UP>  
MOST RECENT DERWENT UPDATE 200255 <200255/DW>  
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> SLART (Simultaneous Left and Right Truncation) is now  
available in the /ABEX field. An additional search field  
/BIX is also provided which comprises both /BI and /ABEX <<<

>>> The BATCH option for structure searches has been  
enabled in WPINDEX/WPIDS and WPIX <<<

>>> PATENT IMAGES AVAILABLE FOR PRINT AND DISPLAY <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES,  
SEE <http://www.derwent.com/dwpi/updates/dwpcov/index.html> <<<

>>> FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE,  
PLEASE VISIT:  
[http://www.stn-international.de/training\\_center/patents/stn\\_guide.pdf](http://www.stn-international.de/training_center/patents/stn_guide.pdf) <<<

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GUIDES, PLEASE VISIT:  
[http://www.derwent.com/userguides/dwpi\\_guide.html](http://www.derwent.com/userguides/dwpi_guide.html) <<<

=> D QUE L91

L28 2 SEA FILE=REGISTRY ABB=ON "GLUTAMIC ACID"/CN  
L29 1 SEA FILE=REGISTRY ABB=ON "PHOSPHORIC ACID"/CN  
L30 3 SEA FILE=REGISTRY ABB=ON MAGNESIUM OXIDE/CN OR CALCIUM  
OXIDE/CN OR ALUMINUM OXIDE/CN  
L31 85117 SEA FILE=HCAPLUS ABB=ON L28 OR GLUTAMIC ACID  
L32 72538 SEA FILE=HCAPLUS ABB=ON L29 OR PHOSPHORIC ACID  
L33 119692 SEA FILE=HCAPLUS ABB=ON L32 OR H3PO4  
L34 537292 SEA FILE=HCAPLUS ABB=ON L30 OR (MAGNESIUM OR ALUMINUM OR  
ALUMINIUM OR MAGNESIUM OR CALCIUM) (W)OXIDE# OR MGO OR AL2O3 OR  
CAO  
L35 27 SEA FILE=HCAPLUS ABB=ON L31 AND L33 AND L34  
L36 4 SEA FILE=HCAPLUS ABB=ON L35 AND FEED?/SC, SX  
L37 3 SEA FILE=HCAPLUS ABB=ON L35 AND FEED?  
L39 1 SEA FILE=WPIX ABB=ON L36 OR L37  
L44 123369 SEA FILE=HCAPLUS ABB=ON L31 OR CORN? (3A) LIQ? OR (YEAST? OR  
FERMENT) (3A) SOLUB? OR WHEY OR MOLASSES  
L45 1 SEA FILE=REGISTRY ABB=ON 13598-36-2/RN  
L46 5066 SEA FILE=HCAPLUS ABB=ON L45  
L47 1 SEA FILE=REGISTRY ABB=ON 7783-28-0/RN  
L48 4804 SEA FILE=HCAPLUS ABB=ON L47  
L49 1 SEA FILE=REGISTRY ABB=ON 7722-76-1/RN  
L50 5120 SEA FILE=HCAPLUS ABB=ON L49  
L51 564073 SEA FILE=HCAPLUS ABB=ON L32 OR L50 OR L48 OR L46 OR PHOSPHORUS  
ACID OR PHOSPHATE? OR PHOSPHONATE?  
L52 722452 SEA FILE=HCAPLUS ABB=ON L34 OR CACL OR CaCO3 OR CaSO4 OR  
"CA(OH)2" OR MGCL OR MG2SO4 OR MFOH OR (CALCIUM OR MAGNESIUM) (W  
) (CHLORIDE OR SULFATE OR SULPHATE OR ACETATE OR PROPIONATE OR  
CARBONATE OR HYDROXIDE)  
L53 769665 SEA FILE=HCAPLUS ABB=ON L52 OR MGCL2 OR MGSO4 OR "MG(OH)2"  
L64 1 SEA FILE=REGISTRY ABB=ON 10043-52-4/RN  
L65 28671 SEA FILE=HCAPLUS ABB=ON L64  
L66 1 SEA FILE=REGISTRY ABB=ON 7786-30-3/RN  
L67 21464 SEA FILE=HCAPLUS ABB=ON L66  
L68 1 SEA FILE=REGISTRY ABB=ON 7778-18-9/RN  
L69 10527 SEA FILE=HCAPLUS ABB=ON L68  
L70 1 SEA FILE=REGISTRY ABB=ON 7487-88-9/RN  
L71 11608 SEA FILE=HCAPLUS ABB=ON L70  
L72 1 SEA FILE=REGISTRY ABB=ON 4075-81-4/RN  
L73 481 SEA FILE=HCAPLUS ABB=ON L72  
L74 1 SEA FILE=REGISTRY ABB=ON 1309-42-8/RN  
L75 10457 SEA FILE=HCAPLUS ABB=ON L74  
L76 1 SEA FILE=REGISTRY ABB=ON 1305-62-0/RN  
L77 20976 SEA FILE=HCAPLUS ABB=ON L76  
L78 1 SEA FILE=REGISTRY ABB=ON 471-34-1/RN  
L79 46750 SEA FILE=HCAPLUS ABB=ON L78  
L80 1 SEA FILE=REGISTRY ABB=ON 62-54-4/RN  
L81 2709 SEA FILE=HCAPLUS ABB=ON L80  
L82 783131 SEA FILE=HCAPLUS ABB=ON L53 OR L81 OR L79 OR L77 OR L75 OR  
L73 OR L71 OR L69 OR L67 OR L65  
L83 837 SEA FILE=HCAPLUS ABB=ON L44 AND L51 AND L82  
L84 218 SEA FILE=HCAPLUS ABB=ON L83 AND FEED?/SC, SX, AB, BI  
L85 8 SEA FILE=HCAPLUS ABB=ON L84 AND (COTTONSEED# OR COTTON SEED#)  
L86 14 SEA FILE=HCAPLUS ABB=ON L84 AND SEED#  
L87 3 SEA FILE=HCAPLUS ABB=ON L83 AND (CALCULI OR CALCULUS OR MILK  
FEVER)  
L90 8 SEA FILE=WPIX ABB=ON (L85 OR L86 OR L87)  
L91 8 SEA FILE=WPIX ABB=ON L90 NOT L39

=> FILE AGRICOLA  
FILE 'AGRICOLA' ENTERED AT 12:27:19 ON 30 AUG 2002

FILE COVERS 1970 TO 11 Jul 2002 (20020711/ED)

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This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> D QUE L92

L28 2 SEA FILE=REGISTRY ABB=ON "GLUTAMIC ACID"/CN  
L29 1 SEA FILE=REGISTRY ABB=ON "PHOSPHORIC ACID"/CN  
L30 3 SEA FILE=REGISTRY ABB=ON MAGNESIUM OXIDE/CN OR CALCIUM  
OXIDE/CN OR ALUMINUM OXIDE/CN  
L31 85117 SEA FILE=HCAPLUS ABB=ON L28 OR GLUTAMIC ACID  
L32 72538 SEA FILE=HCAPLUS ABB=ON L29 OR PHOSPHORIC ACID  
L34 537292 SEA FILE=HCAPLUS ABB=ON L30 OR (MAGNESIUM OR ALUMINUM OR  
ALUMINIUM OR MAGNESIUM OR CALCIUM) (W)OXIDE# OR MGO OR AL2O3 OR  
CAO  
L44 123369 SEA FILE=HCAPLUS ABB=ON L31 OR CORN?(3A)LIQ? OR (YEAST? OR  
FERMENT) (3A)SOLUB? OR WHEY OR MOLASSES  
L45 1 SEA FILE=REGISTRY ABB=ON 13598-36-2/RN  
L46 5066 SEA FILE=HCAPLUS ABB=ON L45  
L47 1 SEA FILE=REGISTRY ABB=ON 7783-28-0/RN  
L48 4804 SEA FILE=HCAPLUS ABB=ON L47  
L49 1 SEA FILE=REGISTRY ABB=ON 7722-76-1/RN  
L50 5120 SEA FILE=HCAPLUS ABB=ON L49  
L51 564073 SEA FILE=HCAPLUS ABB=ON L32 OR L50 OR L48 OR L46 OR PHOSPHORUS  
ACID OR PHOSPHATE? OR PHOSPHONATE?  
L52 722452 SEA FILE=HCAPLUS ABB=ON L34 OR CACL OR CaCO3 OR CaSO4 OR  
"CA(OH)2" OR MGCL OR MG2SO4 OR MFOH OR (CALCIUM OR MAGNESIUM) (W  
) (CHLORIDE OR SULFATE OR SULPHATE OR ACETATE OR PROPIONATE OR  
CARBONATE OR HYDROXIDE)  
L53 769665 SEA FILE=HCAPLUS ABB=ON L52 OR MGCL2 OR MGSO4 OR "MG(OH)2"  
L64 1 SEA FILE=REGISTRY ABB=ON 10043-52-4/RN  
L65 28671 SEA FILE=HCAPLUS ABB=ON L64  
L66 1 SEA FILE=REGISTRY ABB=ON 7786-30-3/RN  
L67 21464 SEA FILE=HCAPLUS ABB=ON L66  
L68 1 SEA FILE=REGISTRY ABB=ON 7778-18-9/RN  
L69 10527 SEA FILE=HCAPLUS ABB=ON L68  
L70 1 SEA FILE=REGISTRY ABB=ON 7487-88-9/RN  
L71 11608 SEA FILE=HCAPLUS ABB=ON L70  
L72 1 SEA FILE=REGISTRY ABB=ON 4075-81-4/RN  
L73 481 SEA FILE=HCAPLUS ABB=ON L72  
L74 1 SEA FILE=REGISTRY ABB=ON 1309-42-8/RN  
L75 10457 SEA FILE=HCAPLUS ABB=ON L74  
L76 1 SEA FILE=REGISTRY ABB=ON 1305-62-0/RN  
L77 20976 SEA FILE=HCAPLUS ABB=ON L76  
L78 1 SEA FILE=REGISTRY ABB=ON 471-34-1/RN  
L79 46750 SEA FILE=HCAPLUS ABB=ON L78  
L80 1 SEA FILE=REGISTRY ABB=ON 62-54-4/RN  
L81 2709 SEA FILE=HCAPLUS ABB=ON L80  
L82 783131 SEA FILE=HCAPLUS ABB=ON L53 OR L81 OR L79 OR L77 OR L75 OR  
L73 OR L71 OR L69 OR L67 OR L65



L83 837 SEA FILE=HCAPLUS ABB=ON L44 AND L51 AND L82  
 L84 218 SEA FILE=HCAPLUS ABB=ON L83 AND FEED?/SC, SX, AB, BI  
 L85 8 SEA FILE=HCAPLUS ABB=ON L84 AND (COTTONSEED# OR COTTON SEED#)

L86 14 SEA FILE=HCAPLUS ABB=ON L84 AND SEED#  
 L87 3 SEA FILE=HCAPLUS ABB=ON L83 AND (CALCULI OR CALCULUS OR MILK  
 FEVER)

L92 0 SEA FILE=AGRICOLA ABB=ON (L85 OR L86 OR L87)

=> FILE CABA

FILE 'CABA' ENTERED AT 12:27:30 ON 30 AUG 2002

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FILE COVERS 1973 TO 2 Aug 2002 (20020802/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> D QUE L93

L28 2 SEA FILE=REGISTRY ABB=ON "GLUTAMIC ACID"/CN  
 L29 1 SEA FILE=REGISTRY ABB=ON "PHOSPHORIC ACID"/CN  
 L30 3 SEA FILE=REGISTRY ABB=ON MAGNESIUM OXIDE/CN OR CALCIUM  
 OXIDE/CN OR ALUMINUM OXIDE/CN  
 L31 85117 SEA FILE=HCAPLUS ABB=ON L28 OR GLUTAMIC ACID  
 L32 72538 SEA FILE=HCAPLUS ABB=ON L29 OR PHOSPHORIC ACID  
 L34 537292 SEA FILE=HCAPLUS ABB=ON L30 OR (MAGNESIUM OR ALUMINUM OR  
 ALUMINIUM OR MAGNESIUM OR CALCIUM) (W) OXIDE# OR MGO OR AL2O3 OR  
 CAO  
 L44 123369 SEA FILE=HCAPLUS ABB=ON L31 OR CORN?(3A) LIQ? OR (YEAST? OR  
 FERMENT) (3A) SOLUB? OR WHEY OR MOLASSES  
 L45 1 SEA FILE=REGISTRY ABB=ON 13598-36-2/RN  
 L46 5066 SEA FILE=HCAPLUS ABB=ON L45  
 L47 1 SEA FILE=REGISTRY ABB=ON 7783-28-0/RN  
 L48 4804 SEA FILE=HCAPLUS ABB=ON L47  
 L49 1 SEA FILE=REGISTRY ABB=ON 7722-76-1/RN  
 L50 5120 SEA FILE=HCAPLUS ABB=ON L49  
 L51 564073 SEA FILE=HCAPLUS ABB=ON L32 OR L50 OR L48 OR L46 OR PHOSPHORUS  
 ACID OR PHOSPHATE? OR PHOSPHONATE?  
 L52 722452 SEA FILE=HCAPLUS ABB=ON L34 OR CACL OR CACO3 OR CASO4 OR  
 "CA(OH)2" OR MGCL OR MG2SO4 OR MFOH OR (CALCIUM OR MAGNESIUM) (W  
 ) (CHLORIDE OR SULFATE OR SULPHATE OR ACETATE OR PROPIONATE OR  
 CARBONATE OR HYDROXIDE)  
 L53 769665 SEA FILE=HCAPLUS ABB=ON L52 OR MGCL2 OR MGSO4 OR "MG(OH)2"  
 L64 1 SEA FILE=REGISTRY ABB=ON 10043-52-4/RN  
 L65 28671 SEA FILE=HCAPLUS ABB=ON L64  
 L66 1 SEA FILE=REGISTRY ABB=ON 7786-30-3/RN  
 L67 21464 SEA FILE=HCAPLUS ABB=ON L66  
 L68 1 SEA FILE=REGISTRY ABB=ON 7778-18-9/RN  
 L69 10527 SEA FILE=HCAPLUS ABB=ON L68  
 L70 1 SEA FILE=REGISTRY ABB=ON 7487-88-9/RN  
 L71 11608 SEA FILE=HCAPLUS ABB=ON L70  
 L72 1 SEA FILE=REGISTRY ABB=ON 4075-81-4/RN  
 L73 481 SEA FILE=HCAPLUS ABB=ON L72  
 L74 1 SEA FILE=REGISTRY ABB=ON 1309-42-8/RN  
 L75 10457 SEA FILE=HCAPLUS ABB=ON L74  
 L76 1 SEA FILE=REGISTRY ABB=ON 1305-62-0/RN  
 L77 20976 SEA FILE=HCAPLUS ABB=ON L76  
 L78 1 SEA FILE=REGISTRY ABB=ON 471-34-1/RN  
 L79 46750 SEA FILE=HCAPLUS ABB=ON L78

L80 1 SEA FILE=REGISTRY ABB=ON 62-54-4/RN  
 L81 2709 SEA FILE=HCAPLUS ABB=ON L80  
 L82 783131 SEA FILE=HCAPLUS ABB=ON L53 OR L81 OR L79 OR L77 OR L75 OR  
 L73 OR L71 OR L69 OR L67 OR L65  
 L83 837 SEA FILE=HCAPLUS ABB=ON L44 AND L51 AND L82  
 L84 218 SEA FILE=HCAPLUS ABB=ON L83 AND FEED?/SC, SX, AB, BI  
 L85 8 SEA FILE=HCAPLUS ABB=ON L84 AND (COTTONSEED# OR COTTON SEED#)  
  
 L86 14 SEA FILE=HCAPLUS ABB=ON L84 AND SEED#  
 L87 3 SEA FILE=HCAPLUS ABB=ON L83 AND (CALCULI OR CALCULUS OR MILK  
 FEVER)  
 L93 3 SEA FILE=CABA ABB=ON (L85 OR L86 OR L87)

=> FILE BIOSIS

FILE 'BIOSIS' ENTERED AT 12:27:41 ON 30 AUG 2002  
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FILE COVERS 1969 TO DATE.  
 CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT  
 FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 28 August 2002 (20020828/ED)

=> D QUE L94

L28 2 SEA FILE=REGISTRY ABB=ON "GLUTAMIC ACID"/CN  
 L29 1 SEA FILE=REGISTRY ABB=ON "PHOSPHORIC ACID"/CN  
 L30 3 SEA FILE=REGISTRY ABB=ON MAGNESIUM OXIDE/CN OR CALCIUM  
 OXIDE/CN OR ALUMINUM OXIDE/CN  
 L31 85117 SEA FILE=HCAPLUS ABB=ON L28 OR GLUTAMIC ACID  
 L32 72538 SEA FILE=HCAPLUS ABB=ON L29 OR PHOSPHORIC ACID  
 L34 537292 SEA FILE=HCAPLUS ABB=ON L30 OR (MAGNESIUM OR ALUMINUM OR  
 ALUMINIUM OR MAGNESIUM OR CALCIUM) (W)OXIDE# OR MGO OR AL2O3 OR  
 CAO  
 L44 123369 SEA FILE=HCAPLUS ABB=ON L31 OR CORN?(3A)LIQ? OR (YEAST? OR  
 FERMENT) (3A) SOLUB? OR WHEY OR MOLASSES  
 L45 1 SEA FILE=REGISTRY ABB=ON 13598-36-2/RN  
 L46 5066 SEA FILE=HCAPLUS ABB=ON L45  
 L47 1 SEA FILE=REGISTRY ABB=ON 7783-28-0/RN  
 L48 4804 SEA FILE=HCAPLUS ABB=ON L47  
 L49 1 SEA FILE=REGISTRY ABB=ON 7722-76-1/RN  
 L50 5120 SEA FILE=HCAPLUS ABB=ON L49  
 L51 564073 SEA FILE=HCAPLUS ABB=ON L32 OR L50 OR L48 OR L46 OR PHOSPHORUS  
 ACID OR PHOSPHATE? OR PHOSPHONATE?  
 L52 722452 SEA FILE=HCAPLUS ABB=ON L34 OR CACL OR CACO3 OR CASO4 OR  
 "CA(OH)2" OR MGCL OR MG2SO4 OR MFOH OR (CALCIUM OR MAGNESIUM) (W  
 ) (CHLORIDE OR SULFATE OR SULPHATE OR ACETATE OR PROPIONATE OR  
 CARBONATE OR HYDROXIDE)  
 L53 769665 SEA FILE=HCAPLUS ABB=ON L52 OR MGCL2 OR MGSO4 OR "MG(OH)2"  
 L64 1 SEA FILE=REGISTRY ABB=ON 10043-52-4/RN  
 L65 28671 SEA FILE=HCAPLUS ABB=ON L64  
 L66 1 SEA FILE=REGISTRY ABB=ON 7786-30-3/RN  
 L67 21464 SEA FILE=HCAPLUS ABB=ON L66  
 L68 1 SEA FILE=REGISTRY ABB=ON 7778-18-9/RN  
 L69 10527 SEA FILE=HCAPLUS ABB=ON L68  
 L70 1 SEA FILE=REGISTRY ABB=ON 7487-88-9/RN  
 L71 11608 SEA FILE=HCAPLUS ABB=ON L70  
 L72 1 SEA FILE=REGISTRY ABB=ON 4075-81-4/RN  
 L73 481 SEA FILE=HCAPLUS ABB=ON L72

L74 1 SEA FILE=REGISTRY ABB=ON 1309-42-8/RN  
 L75 10457 SEA FILE=HCAPLUS ABB=ON L74  
 L76 1 SEA FILE=REGISTRY ABB=ON 1305-62-0/RN  
 L77 20976 SEA FILE=HCAPLUS ABB=ON L76  
 L78 1 SEA FILE=REGISTRY ABB=ON 471-34-1/RN  
 L79 46750 SEA FILE=HCAPLUS ABB=ON L78  
 L80 1 SEA FILE=REGISTRY ABB=ON 62-54-4/RN  
 L81 2709 SEA FILE=HCAPLUS ABB=ON L80  
 L82 783131 SEA FILE=HCAPLUS ABB=ON L53 OR L81 OR L79 OR L77 OR L75 OR  
 L73 OR L71 OR L69 OR L67 OR L65  
 L83 837 SEA FILE=HCAPLUS ABB=ON L44 AND L51 AND L82  
 L84 218 SEA FILE=HCAPLUS ABB=ON L83 AND FEED?/SC, SX, AB, BI  
 L85 8 SEA FILE=HCAPLUS ABB=ON L84 AND (COTTONSEED# OR COTTON SEED#)  
  
 L86 14 SEA FILE=HCAPLUS ABB=ON L84 AND SEED#  
 L87 3 SEA FILE=HCAPLUS ABB=ON L83 AND (CALCULI OR CALCULUS OR MILK  
 FEVER)  
 L94 1 SEA FILE=BIOSIS ABB=ON (L85 OR L86 OR L87)

=> FILE MEDLINE

FILE 'MEDLINE' ENTERED AT 12:27:53 ON 30 AUG 2002

FILE LAST UPDATED: 29 AUG 2002 (20020829/UP). FILE COVERS 1958 TO DATE.

On June 9, 2002, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2002 vocabulary. Enter HELP THESAURUS for details.

THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE SUBSTANCE IDENTIFICATION.

=> D QUE L95

L28 2 SEA FILE=REGISTRY ABB=ON "GLUTAMIC ACID"/CN  
 L29 1 SEA FILE=REGISTRY ABB=ON "PHOSPHORIC ACID"/CN  
 L30 3 SEA FILE=REGISTRY ABB=ON MAGNESIUM OXIDE/CN OR CALCIUM  
 OXIDE/CN OR ALUMINUM OXIDE/CN  
 L31 85117 SEA FILE=HCAPLUS ABB=ON L28 OR GLUTAMIC ACID  
 L32 72538 SEA FILE=HCAPLUS ABB=ON L29 OR PHOSPHORIC ACID  
 L34 537292 SEA FILE=HCAPLUS ABB=ON L30 OR (MAGNESIUM OR ALUMINUM OR  
 ALUMINIUM OR MAGNESIUM OR CALCIUM) (W)OXIDE# OR MGO OR AL2O3 OR  
 CAO  
 L44 123369 SEA FILE=HCAPLUS ABB=ON L31 OR CORN?(3A)LIQ? OR (YEAST? OR  
 FERMENT) (3A)SOLUB? OR WHEY OR MOLASSES  
 L45 1 SEA FILE=REGISTRY ABB=ON 13598-36-2/RN  
 L46 5066 SEA FILE=HCAPLUS ABB=ON L45  
 L47 1 SEA FILE=REGISTRY ABB=ON 7783-28-0/RN  
 L48 4804 SEA FILE=HCAPLUS ABB=ON L47  
 L49 1 SEA FILE=REGISTRY ABB=ON 7722-76-1/RN  
 L50 5120 SEA FILE=HCAPLUS ABB=ON L49  
 L51 564073 SEA FILE=HCAPLUS ABB=ON L32 OR L50 OR L48 OR L46 OR PHOSPHORUS  
 ACID OR PHOSPHATE? OR PHOSPHONATE?  
 L52 722452 SEA FILE=HCAPLUS ABB=ON L34 OR CACL OR CACO3 OR CASO4 OR  
 "CA(OH)2" OR MGCL OR MG2SO4 OR MFOH OR (CALCIUM OR MAGNESIUM) (W  
 ) (CHLORIDE OR SULFATE OR SULPHATE OR ACETATE OR PROPIONATE OR  
 CARBONATE OR HYDROXIDE)  
 L53 769665 SEA FILE=HCAPLUS ABB=ON L52 OR MGCL2 OR MGSO4 OR "MG(OH)2"  
 L64 1 SEA FILE=REGISTRY ABB=ON 10043-52-4/RN  
 L65 28671 SEA FILE=HCAPLUS ABB=ON L64

L66 1 SEA FILE=REGISTRY ABB=ON 7786-30-3/RN  
 L67 21464 SEA FILE=HCAPLUS ABB=ON L66  
 L68 1 SEA FILE=REGISTRY ABB=ON 7778-18-9/RN  
 L69 10527 SEA FILE=HCAPLUS ABB=ON L68  
 L70 1 SEA FILE=REGISTRY ABB=ON 7487-88-9/RN  
 L71 11608 SEA FILE=HCAPLUS ABB=ON L70  
 L72 1 SEA FILE=REGISTRY ABB=ON 4075-81-4/RN  
 L73 481 SEA FILE=HCAPLUS ABB=ON L72  
 L74 1 SEA FILE=REGISTRY ABB=ON 1309-42-8/RN  
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 L76 1 SEA FILE=REGISTRY ABB=ON 1305-62-0/RN  
 L77 20976 SEA FILE=HCAPLUS ABB=ON L76  
 L78 1 SEA FILE=REGISTRY ABB=ON 471-34-1/RN  
 L79 46750 SEA FILE=HCAPLUS ABB=ON L78  
 L80 1 SEA FILE=REGISTRY ABB=ON 62-54-4/RN  
 L81 2709 SEA FILE=HCAPLUS ABB=ON L80  
 L82 783131 SEA FILE=HCAPLUS ABB=ON L53 OR L81 OR L79 OR L77 OR L75 OR  
 L73 OR L71 OR L69 OR L67 OR L65  
 L83 837 SEA FILE=HCAPLUS ABB=ON L44 AND L51 AND L82  
 L84 218 SEA FILE=HCAPLUS ABB=ON L83 AND FEED?/SC, SX, AB, BI  
 L85 8 SEA FILE=HCAPLUS ABB=ON L84 AND (COTTONSEED# OR COTTON SEED#)  
  
 L86 14 SEA FILE=HCAPLUS ABB=ON L84 AND SEED#  
 L87 3 SEA FILE=HCAPLUS ABB=ON L83 AND (CALCULI OR CALCULUS OR MILK  
 FEVER)  
 L95 0 SEA FILE=MEDLINE ABB=ON (L85 OR L86 OR L87)

=> DUP REM L89 L91 L93 L94

FILE 'HCAPLUS' ENTERED AT 12:28:15 ON 30 AUG 2002  
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FILE 'WPIX' ENTERED AT 12:28:15 ON 30 AUG 2002  
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FILE 'CABA' ENTERED AT 12:28:15 ON 30 AUG 2002  
 COPYRIGHT (C) 2002 CAB INTERNATIONAL (CABI)

FILE 'BIOSIS' ENTERED AT 12:28:15 ON 30 AUG 2002  
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PROCESSING COMPLETED FOR L89

PROCESSING COMPLETED FOR L91

PROCESSING COMPLETED FOR L93

PROCESSING COMPLETED FOR L94

L96 31 DUP REM L89 L91 L93 L94 (2 DUPLICATES REMOVED)

=> D L96 1-31 ALL HITSTR

L96 ANSWER 1 OF 31 HCAPLUS COPYRIGHT 2002 ACS  
 AN 2002:609920 HCAPLUS  
 TI Human desaturase gene and uses thereof  
 IN Mukerji, Pradip; Leonard, Amanda Eun-Yeong; Huang, Yung-Sheng; Das, Tapas  
 PA Abbott Laboratories, USA  
 SO U.S., 88 pp., Cont.-in-part of U.S. 5,972,664.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM C12P007-40

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ICS C12N009-02; C12N001-20; C12N015-00; C07H021-04

NCL 435136000

CC 3-3 (Biochemical Genetics)

Section cross-reference(s): 7, 13, 17, 62, 63

FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6432684	B1	20020813	US 1999-227613	19990108
	US 5972664	A	19991026	US 1997-833610	19970411
	WO 9846765	A1	19981022	WO 1998-US7422	19980410
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 6428990	B1	20020806	US 1999-439261	19991112
	WO 2000040705	A2	20000713	WO 1999-US31163	19991229
	WO 2000040705	A3	20001109		
	W: AU, BG, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NO, NZ, PL, RO, SI, SK, TR				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1141252	A2	20011010	EP 1999-966710	19991229
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRAI	US 1997-833610	A2	19970411		
	WO 1998-US7422	A2	19980410		
	US 1999-227613	A2	19990108		
	WO 1999-US31163	W	19991229		
AB	The subject invention relates to the identification of a gene involved in the desatn. of polyunsatd. fatty acids at carbon 5 (i.e., "human .DELTA.5-desaturase") and to uses thereof. In particular, human .DELTA.5-desaturase may be utilized, for example, in the conversion of dihomo-.gamma.-linolenic acid (DGLA) to arachidonic acid (AA) and in the conversion of 20:4n-3 to eicosapentaenoic acid (EPA). AA or polyunsatd. fatty acids produced therefrom may be added to pharmaceutical compns., nutritional compns., animal <b>feeds</b> , as well as other products such as cosmetics. The subject invention relates to the identification of a gene involved in the desatn. of polyunsatd. fatty acids at carbon 5 (i.e., "human .DELTA.5-desaturase") and to uses thereof. The cDNA encoding human .DELTA.5-desaturase was isolated from a human monocyte cDNA library based on its homol. to desaturases from Mortierella alpina desaturase and use of the Incyte LifeSeq database of expressed sequence tags. Human .DELTA.5-desaturase may be utilized, for example, in the conversion of dihomo-.gamma.-linolenic acid (DGLA) to arachidonic acid (AA) and in the conversion of 20:4n-3 to eicosapentaenoic acid (EPA). AA or polyunsatd. fatty acids produced therefrom may be added to pharmaceutical compns., nutritional compns., animal <b>feeds</b> , as well as other products such as cosmetics.				
ST	human desaturase cDNA sequence expression vector; nutrition compn polyunsatd fatty acid desaturase				
IT	INDEXING IN PROGRESS				
IT	Fats and Glyceridic oils				
	RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (borage <b>seed</b> ; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)				
IT	Oat				

- (bran; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Caseins
  - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
  - (calcium complexes; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Bacillus subtilis
  - Candida
  - Cyanobacteria
  - Escherichia coli
  - Eukaryota
  - Fungi
  - Hansenula
  - Insecta
  - Kluyveromyces
  - Lipomyces starkeyi
  - Mammalia
  - Pichia
  - Prokaryote
  - Saccharomyces cerevisiae
  - Saccharomyces pastorianus
  - Trichoderma
  - Yarrowia lipolytica
  - Yeast
    - (cell, .DELTA.5-desaturase can be expressed in; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Canola oil
  - Coconut oil
  - Diglycerides
  - Mineral elements
  - Monoglycerides
  - Protein hydrolyzates
  - Soybean oil
  - Vitamins
  - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
  - (compn. contg. polyunsatd. fatty acids and; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Genetic vectors
  - (comprising .DELTA.5-desaturase; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Culture media
  - (contg. an essential fatty acids; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Rice (Oryza sativa)
  - (crisped; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Food
  - (dietetic; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Whey
  - (electrodialyzed, compn. contg. polyunsatd. fatty acids and; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Gene, animal
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
  - (encoding .DELTA.5-desaturase; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Fats and Glyceridic oils
  - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
  - (fish; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)

- IT Syrups (sweetening agents)  
(high-fructose hydrolyzed starch; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Safflower oil  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(high-oleic; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Milk substitutes  
(human; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Syrups (sweetening agents)  
(hydrolyzed starch; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Animal cell  
(insect, recombinant host; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Animal cell  
(mammalian, recombinant host; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Fatty acids  
RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(monounsaturated; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Flavoring materials  
(natural and artificial; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Bran  
(oat; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Cottonseed oil  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(partially hydrogenated; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Fatty acids  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(polyunsaturated; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Cocoa products  
(powders; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Cosmetics
- Dietary fiber
- Drugs
- Feed additives
- Food additives
- Honey
- Human
- Malt
- Molecular cloning
- Protein sequences
- cDNA sequences  
(protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Fatty acids  
RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Caseins

- Corn oil
  - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
    - (protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Plant cell
  - (recombinant host; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Milk
  - (skim, electrodialyzed, compn. contg. polyunsatd. fatty acids and; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Caseins
  - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
    - (sodium complexes; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Polysaccharides
  - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
    - (soy; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Lecithins
  - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
    - (soya; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Proteins
  - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
    - (soybean, compn. contg. polyunsatd. fatty acids and; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT Diet
  - (supplements; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT 1783-84-2, dihomogamma.-linolenic acid 24880-40-8
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    - (as substrate of .DELTA.5-desaturase; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT 50-81-7, Vitamin C 50-99-7, Glucose 63-42-3 1406-16-2, Vitamin D 1406-18-4, Vitamin E 11103-57-4, Vitamin A
  - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
    - (compn. contg. polyunsatd. fatty acids and; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT 9005-25-8, Starch
  - RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
    - (corn, hydrolyzed; protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT 112-80-1, Oleic acid
  - RL: BCP (Biochemical process); FFD (Food or feed use); BIOL (Biological study); PROC (Process); USES (Uses)
    - (protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT 51901-23-6P, Fatty acid .DELTA.5-desaturase
  - RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); FFD (Food or feed use); NUU (Other use, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
    - (protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)
- IT 57-88-5, Cholesterol 506-32-1, Arachidonic acid 6217-54-5, Docosahexaenoic acid
  - RL: BSU (Biological study, unclassified); BIOL (Biological study)
    - (protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)



IT 60-33-3, 9,12-Octadecadienoic acid (9Z,12Z)- 463-40-1, .alpha.-Linolenic acid 10417-94-4 24880-45-3  
 RL: BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)

IT 56-81-5, Glycerol 57-10-3, Palmitic acid 57-11-4, Stearic acid 57-48-7, D-Fructose 57-50-1, Sucrose 58-56-0, Pyridoxine hydrochloride 58-85-5, Biotin 58-95-7, .alpha.-Tocopheryl acetate 59-30-3, Folic acid 63-68-3, L-Methionine 67-03-8, Thiamine chloride hydrochloride 67-48-1, Choline chloride 67-97-0, vitamin D3 68-19-9, Cyanocobalamin 79-81-2, vitamin A palmitate 83-88-5, Riboflavin 84-80-0, Phylloquinone 87-89-8, myo-Inositol 98-92-0, Niacinamide 107-35-7, Taurine 124-07-2, Caprylic acid 137-08-6, Calcium pantothenate 142-62-1, Caproic acid 334-48-5, Capric acid 373-49-9, Palmitoleic acid **471-34-1, Calcium carbonate** 506-26-3, .gamma.-Linolenic acid 527-09-3, Copper gluconate 541-15-1, L-Carnitine 866-83-1, Potassium citrate 994-36-5, Sodium citrate **1309-48-4, Magnesium oxide** 1314-13-2, Zinc oxide 1934-21-0 2783-94-0, FD&C Yellow #6 7235-40-7, .beta.-Carotene 7447-40-7, Potassium chloride 7631-95-0, Sodium molybdate 7647-14-5, Sodium chloride 7681-11-0, Potassium iodide 7693-13-2, Calcium citrate 7720-78-7, Ferrous sulfate 7732-18-5, WATER 7733-02-0, Zinc sulfate 7757-86-0 7758-11-4, Potassium **phosphate** dibasic 7758-87-4 7758-98-7, Cupric sulfate 7778-77-0, Potassium **phosphate** monobasic 7785-87-7, Manganese sulfate **7786-30-3, Magnesium chloride** 9000-07-1, Carrageenan 9004-34-6, Cellulose 9050-36-6, Maltodextrin 10045-86-0, Ferric orthophosphate 10102-18-8, Sodium selenite 25383-99-7, Sodium stearyl lactylate 39345-92-1, Chromium chloride 71010-52-1, Gellan gum  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

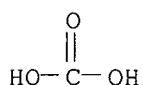
- (1) Anon; WO 9311245 1993 HCAPLUS
- (2) Anon; WO 9411516 1994 HCAPLUS
- (3) Anon; WO 9613591 1996 HCAPLUS
- (4) Anon; WO 9846765 1998 HCAPLUS
- (5) Anon; WO 0020603 2000 HCAPLUS
- (6) Anon; The Faseb Journal, Part 1, Abstract 3093, Experimental Biology 98 1998, PA532
- (7) Chaudhary; WO 9846763 A1 1998 HCAPLUS
- (8) Cho, H; Journal of Biological Chemistry 1999, V274(52), P37335 HCAPLUS
- (9) Cho, H; The Journal of Biological Chemistry 1999, V274(1), P471 HCAPLUS
- (10) Hitz; US 5443974 A 1995 HCAPLUS
- (11) Knutzon, D; The Journal of Biological Chemistry 1998, V273(45), P29360 HCAPLUS
- (12) Michaelson, L; Journal of Biological Chemistry 1998, V273(30), P19055 HCAPLUS
- (13) Thomas; US 5552306 A 1996 HCAPLUS

IT **471-34-1, Calcium carbonate 1309-48-4, Magnesium oxide 7786-30-3, Magnesium chloride**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (protein and cDNA sequences of human .DELTA.5-desaturase gene and uses thereof)

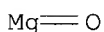
RN 471-34-1 HCAPLUS

CN Carbonic acid calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



Ca

RN 1309-48-4 HCAPLUS  
CN Magnesium oxide (MgO) (9CI) (CA INDEX NAME)



RN 7786-30-3 HCAPLUS  
CN Magnesium chloride (MgCl<sub>2</sub>) (9CI) (CA INDEX NAME)



L96 ANSWER 2 OF 31 HCAPLUS COPYRIGHT 2002 ACS  
AN 2002:591669 HCAPLUS  
TI Symbiotic regenerative compositions containing microorganisms  
IN Schuer, Joerg-Peter  
PA Germany  
SO Eur. Pat. Appl., 25 pp.  
CODEN: EPXXDW  
DT Patent  
LA German  
IC ICM A61K045-06  
ICS A61P043-00  
CC 18-6 (Animal Nutrition)  
Section cross-reference(s): 63, 17, 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1228769	A1	20020807	EP 2001-102384	20010202
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AB	The invention concerns regenerative drugs, dietary supplements, <b>feed</b> additives that contain microorganisms and modulating substances, e.g. enzymes, GRAS (Generally Recognized As Safe) aromas, plant exts. Further the compns. contain vitamins, minerals, growth promoters, carrier substances, etc. Microorganisms are a-pathogenic, pathogenic or facultative pathogenic, .				
ST	symbiotic regenerative compn microorganism Lactobacillus diet <b>feed</b> supplement				
IT	Esters RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (GRAS; symbiotic regenerative compns. contg. microorganisms)				
IT	Balsams RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (Peru; symbiotic regenerative compns. contg. microorganisms)				

IT Wool  
(angora; symbiotic regenerative compns. contg. microorganisms)

IT Fats and Glyceridic oils  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(animal, seal; symbiotic regenerative compns. contg. microorganisms)

IT Fats and Glyceridic oils  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(animal, whale; symbiotic regenerative compns. contg. microorganisms)

IT Oak (Quercus)  
(bark; symbiotic regenerative compns. contg. microorganisms)

IT Pollen

IT Venoms  
(bee; symbiotic regenerative compns. contg. microorganisms)

IT Essential oils  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(cajuput; symbiotic regenerative compns. contg. microorganisms)

IT Brain  
(calf, ext.; symbiotic regenerative compns. contg. microorganisms)

IT Wool  
(cashmere; symbiotic regenerative compns. contg. microorganisms)

IT Intestine  
(catgut; symbiotic regenerative compns. contg. microorganisms)

IT Heart  
(cattle, ext.; symbiotic regenerative compns. contg. microorganisms)

IT Musks  
(civet; symbiotic regenerative compns. contg. microorganisms)

IT Balsams  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(copaiba; symbiotic regenerative compns. contg. microorganisms)

IT Mushroom  
(edible; symbiotic regenerative compns. contg. microorganisms)

IT Liver  
(exts.; symbiotic regenerative compns. contg. microorganisms)

IT Soybean (Glycine max)  
(flour; symbiotic regenerative compns. contg. microorganisms)

IT Drug delivery systems  
(infusions; symbiotic regenerative compns. contg. microorganisms)

IT Drug delivery systems  
(injections; symbiotic regenerative compns. contg. microorganisms)

IT Birch (Betula)  
(leaf; symbiotic regenerative compns. contg. microorganisms)

IT Drug delivery systems  
(liqs.; symbiotic regenerative compns. contg. microorganisms)

IT Embryophyta  
(medicinal plant; symbiotic regenerative compns. contg. microorganisms)

IT Fats and Glyceridic oils  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(mink; symbiotic regenerative compns. contg. microorganisms)

IT Fatty acids  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(of edible oils; symbiotic regenerative compns. contg. microorganisms)

IT Semen  
(oil; symbiotic regenerative compns. contg. microorganisms)

IT Drug delivery systems

(ointments; symbiotic regenerative compns. contg. microorganisms)

IT Bile  
(ox; symbiotic regenerative compns. contg. microorganisms)

IT Paper  
(parchment; symbiotic regenerative compns. contg. microorganisms)

IT Phenols  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(polyphenols, nonpolymeric; symbiotic regenerative compns. contg. microorganisms)

IT Drug delivery systems  
(powders; symbiotic regenerative compns. contg. microorganisms)

IT Juniper (Juniperus)  
(savin; symbiotic regenerative compns. contg. microorganisms)

IT Flax  
(seeds; symbiotic regenerative compns. contg. microorganisms)

IT Venoms  
(snake; symbiotic regenerative compns. contg. microorganisms)

IT Orange  
(sour; symbiotic regenerative compns. contg. microorganisms)

IT Flours and Meals  
(soybean; symbiotic regenerative compns. contg. microorganisms)

IT Fats and Glyceridic oils  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sperm oil; symbiotic regenerative compns. contg. microorganisms)

IT Drug delivery systems  
(sprays; symbiotic regenerative compns. contg. microorganisms)

IT Tallow  
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(stearins; symbiotic regenerative compns. contg. microorganisms)

IT Diet  
(supplements; symbiotic regenerative compns. contg. microorganisms)

IT Drug delivery systems  
(suppositories; symbiotic regenerative compns. contg. microorganisms)

IT Actinidia chinensis  
Alcaligenes faecalis  
Algae  
Allergy inhibitors  
Allspice (Pimenta dioica)  
Almond (Prunus amygdalus)  
Aloe (genus)  
Animal  
Anise  
Anti-infective agents  
Antioxidants  
Antitumor agents  
Apple  
Arnica  
Avocado  
Bacillus subtilis  
Banana (Musa)  
Beeswax  
Bifidobacterium bifidum  
Black salsify (Scorzonera hispanica)  
Blood  
Boldo (Peumus boldus)  
Bone  
Borrelia buccalis

Burdock  
Calamus (palm genus)  
Camellia  
Caraway (Carum carvi)  
Cardamom  
Carrot  
Caviar  
Centaurea cyanus  
Centaureum  
Chelidonium majus  
Chrysanthemum  
Cinchona  
Cinnamon (horticultural common name)  
Citrobacter  
Cladosporium  
Clove (Syzygium aromaticum)  
Clover (Trifolium)  
Cocoa (Theobroma cacao)  
Coconut (Cocos nucifera)  
Coffee (Coffea)  
Coltsfoot  
Comfrey (Symphytum officinale)  
Coneflower  
Coral  
Coriander  
Corynebacterium pseudodiphtheriticum  
Corynebacterium xerosis  
Croton eluteria  
Crustacea  
Cucumber (Cucumis sativus)  
Cypress (Cupressus)  
Dactylopius coccus  
Dandelion  
Derris (genus)  
Digestive tract  
Dill  
Egg, poultry  
Emulsifying agents  
Equisetum  
Eucalyptus  
Eucalyptus citriodora  
Feather  
    **Feed additives**  
Fennel (Foeniculum vulgare)  
Fenugreek (Trigonella foenum-graecum)  
Fish  
Flavor  
Fungicides  
Fur  
Gaffkya tetragena  
Garlic (Allium sativum)  
Gentian (Gentiana)  
Geotrichum  
Ginger  
Ginkgo  
Ginseng (Panax)  
Grapefruit  
Guarana (Paullinia cupana)  
Hair  
Hamamelis

Hawthorn (Crataegus)  
Hay  
Hibiscus  
Honey  
Hop (Humulus)  
Horse chestnut (Aesculus)  
Human  
Immunostimulants  
Immunosuppressants  
Immunotherapy  
Ivory  
Ivy (Hedera)  
Jojoba (Simmondsia chinensis)  
Juniper (Juniperus)  
Lactobacillus acidophilus  
Lactobacillus casei  
Lactobacillus delbrueckii bulgaricus  
Lactobacillus fermentum  
Lamium  
Laurus nobilis  
Lavender (Lavandula)  
Lawsonia inermis  
Leather  
Lemon (Citrus limon)  
Lemongrass  
Licorice (Glycyrrhiza)  
Lime (Citrus aurantifolia)  
Linden (Tilia)  
Liquidambar  
Mallow (Malva)  
Mandarin orange  
Mango (Mangifera indica)  
Marigold  
Marjoram  
Marshmallow (Althaea officinalis)  
Matricaria recutita  
Meat  
Melissa  
Melon (plant)  
Mentha aquatica  
Menyanthes trifoliata  
Milk  
Mistletoe  
Moraxella catarrhalis  
Moschus  
Mucor  
Mustard (Brassica)  
Myristica  
Neisseria flava  
Neisseria flavescens  
Neisseria perflava  
Neisseria sicca  
Neisseria subflava  
Nut (seed)  
Oat  
Odor and Odorous substances  
Onion (Allium cepa)  
Orange  
Oregano  
Orthosiphon

Papaya (*Carica papaya*)  
Paprika  
Passionflower (*Passiflora edulis*)  
Peach (*Prunus persica*)  
Pearl  
Peppermint (*Mentha piperita*)  
Phosphors  
Pine (*Pinus*)  
Placenta  
Plantago major  
Pollen  
Porifera  
Potato (*Solanum tuberosum*)  
Poultry  
Preservatives  
Primrose (*Primula veris*)  
Propolis  
Quassia  
Rhodotorula rubra  
Rhubarb (*Rheum*)  
Rice (*Oryza sativa*)  
Rosemary  
Royal jelly  
Ruscus aculeatus  
Saccharomyces cerevisiae  
Sage (*Salvia*)  
Sarcina  
Savory (*Satureja*)  
Seal (animal)  
Serratia marcescens  
Sesame (*Sesamum indicum*)  
Silk  
Solvents  
Soybean (*Glycine max*)  
Spruce (*Picea*)  
St.-John's-wort (*Hypericum*)  
Staphylococcus epidermidis  
Streptococcus  
Styrax  
Sunflower  
Tarragon (*Artemisia dracunculus*)  
Tea (*Camellia sinensis*)  
Theobroma grandiflorum  
Thyme (*Thymus*)  
Torulopsis  
Urtica  
Valerian (*Valeriana*)  
Veillonella parvula  
Veratrum viride  
Walnut  
Watermelon (*Citrullus lanatus*)  
Wheat bran  
Whey  
Yarrow (*Achillea*)  
Yeast  
Yew (*Taxus*)  
Ylang-ylang (*Cananga odorata*)  
(symbiotic regenerative compns. contg. microorganisms)  
IT Amino acids  
Anthocyanins

Antitoxins  
 Bile acids  
 Carbohydrates  
 Caseins  
 Castor oil  
 Collagens  
 Enzymes  
 Essential oils  
 Estrogens  
 Flavones  
 Flavonoids  
 Gelatins  
 Hormones, animal  
 Keratins  
 Lanolin  
 Lecithins  
 Minerals  
 Phenols  
 Proteins  
 Rennets  
 Rosin  
 Saponins  
 Shellac  
 Tannins  
 Terpenes  
 Trace metals  
 Turpentine oil  
 Vitamins  
 Waxes

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(symbiotic regenerative compns. contg. microorganisms)

IT Drug delivery systems

(tablets; symbiotic regenerative compns. contg. microorganisms)

IT Drug delivery systems

(transdermal; symbiotic regenerative compns. contg. microorganisms)

IT Larch (Larix)

(turpentine; symbiotic regenerative compns. contg. microorganisms)

IT Wine

(vermouth; symbiotic regenerative compns. contg. microorganisms)

IT 9005-25-8, starch

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(potato; symbiotic regenerative compns. contg. microorganisms)

IT 50-14-6, Calciferol 50-21-5, Lactic acid 50-81-7, L-Ascorbic acid  
 52-90-4, L-Cysteine 56-81-5, Glycerin 56-87-1, L-Lysine 57-11-4D,  
 Stearic acid, derivs. 57-13-6, Urea 57-55-6, Propyleneglycol  
 57-83-0, Progesterone 57-88-5, Cholesterol 58-22-0, Testosterone  
 59-02-9, .alpha.-Tocopherol 59-43-8, Thiamin 59-67-6, Nicotinic acid  
 62-54-4, Calciumacetate 64-17-5, Ethylalcohol 64-18-6, Formic  
 acid 64-19-7, Acetic acid 66-25-1, Hexylaldehyde 67-63-0,  
 Isopropanol 69-65-8, Mannite 70-47-3, L-Asparagine 71-23-8,  
 Propylalcohol 71-36-3, n-Butylalcohol 71-41-0, n-Amylalcohol  
 75-07-0, Acetaldehyde 76-22-2, Camphor 77-92-9, Citric acid 78-70-6,  
 Linalool 78-83-1, Iso Butylalcohol 78-84-2 79-83-4, Pantothenic acid  
 83-79-4, Rotenone 83-88-5, Riboflavin 87-44-5, .beta.-Caryophyllen  
 87-66-1, Pyrogallol 87-89-8, Inositol 89-83-8, Thymol 90-64-2,  
 Mandelic acid 93-15-2, Methyleugenol 93-28-7, Eugenolacetate  
 94-59-7, Safrol 94-86-0, Propenylguaethol 97-53-0, Eugenol 97-54-1,  
 Isoeugenol 98-01-1, Furfural 98-85-1, .alpha.-Methylbenzylalcohol



100-51-6, Benzylalcohol 100-52-7, Benzaldehyde 100-66-3, Anisol  
 102-16-9, Benzylphenylacetate 102-76-1, Triacetine 103-09-3,  
 Octylacetate 103-45-7 103-54-8, Cinnamylacetate 103-82-2,  
 Phenylacetic acid 104-46-1, Anethol 104-53-0, Hydrocinnamic aldehyde  
 104-54-1, Cinnamic alcohol 104-55-2, Cinnamic aldehyde 105-13-5, Anise  
 alcohol 105-82-8, Acetaldehyde dipropylacetal 105-87-3, Geranylacetate  
 106-22-9, Citronellol 106-23-0, Citronellal 106-24-1, Geraniol  
 108-46-3, Resorcin 108-73-6, Phloroglucin 108-95-2, Phenol 109-52-4,  
 Valeric acid 110-17-8, Fumaric acid 110-82-7, Cyclohexane 111-02-4,  
 squalene 111-70-6, Heptylalcohol 111-71-7, Heptylaldehyde 111-87-5,  
 Octylalcohol 112-05-0, Pelargonic acid 112-30-1, n-Decylalcohol  
 112-31-2, Decanal 112-43-6, 10-Undecen-1-ol 112-53-8, Laurylalcohol  
 112-54-9, Laurylaldehyde 113-24-6, Sodium pyruvate 115-95-7,  
 Linalylacetate 120-57-0, Heliotropin 120-80-9, Catechin 121-32-4,  
 Ethylvanillin 121-33-5, Vanillin 122-03-2, Cuminaldehyde 122-59-8,  
 Phenoxyacetic acid 122-72-5, Hydrocinnamylacetate 122-78-1,  
 Phenylacetaldehyde 122-87-2, Glycin 123-31-9, Hydroquinone 123-38-6,  
 Propionaldehyde 123-51-3, Iso-Amylalcohol 123-86-4, n-Butylacetate  
 123-92-2, Iso-Amylacetate 124-04-9, Hexanedioic acid 124-13-0,  
 Octylaldehyde 124-19-6, Nonylaldehyde 125-46-2, Usnic acid 127-08-2,  
 Potassium acetate 127-09-3, Sodium acetate 127-40-2, Lutein  
 137-08-6, Calciumpantothenate 137-66-6, Ascorbic palmitate 138-86-3,  
 Limonen 140-11-4, Benzylacetate 140-67-0, Methylchavicol 141-78-6,  
 Ethylacetate 142-62-1, Capronic acid 142-92-7, Hexylacetate  
 143-08-8, Nonylalcohol 147-85-3, L-Proline 148-03-8, .beta.-Tocopherol  
 149-91-7D, Gallic acid, derivs. 150-84-5, Citronellylacetate  
 153-18-4, Rutin 303-98-0, Coenzyme Q10 321-30-2, Adenine sulfate  
 331-39-5, Caffeic acid 367-51-1, Sodium thioglycolate 432-70-2,  
 .alpha.-Carotene 499-12-7, Aconitic acid 499-75-2, Carvacrol  
 501-52-0, Hydrocinnamic acid 503-74-2, Iso-Valeric acid 507-70-0,  
 Borneol 513-86-0, Acetoin 514-78-3, Canthaxanthine 515-69-5,  
 .alpha.-Bisabolol 526-83-0, Tartaric acid 536-60-7, Cumylalcohol  
 541-15-1, L-Carnitine 621-82-9, Cinnamic acid 871-22-7, Acetaldehyde  
 dibutyl acetal 1260-17-9, Carminic acid 1335-39-3, Hexenal  
 1390-65-4, Carmine 1393-63-1, Annatto 1398-61-4, chitin 1708-35-6  
 2111-75-3, Perillaaldehyde 2216-51-5 2568-25-4, Benzaldehyde propylene  
 glycolacetal 5392-40-5, Citral 5660-60-6 6812-78-8, Rhodinol  
 6915-15-7, Malic acid 7212-44-4, Nerolidol 7235-40-7, .beta.-Carotene  
 7439-89-6, Iron 7439-95-4, Magnesium 7439-96-5, Manganese 7439-98-7,  
 Molybdenum 7440-09-7, Potassium 7440-21-3, Silicon 7440-31-5, Tin  
 7440-47-3, Chromium 7440-50-8, Copper 7440-70-2, Calcium 7447-41-8,  
 Lithiumchloride **7487-88-9, Magnesium-sulfate**  
 7493-57-4, Acetaldehyde phenethylpropyl acetal 7553-56-2, Iodine  
 7558-79-4, Disodium hydrogen **phosphate** 7616-22-0,  
 .gamma.-Tocopherol 7631-86-9, Silica 7647-14-5, Sodium chloride  
 7758-11-4 7778-77-0, Potassium dihydrogen **phosphate**  
 7779-41-1, Decanaldimethyl acetal 7782-49-2, Selenium 7782-50-5,  
 Chlorine 8000-41-7, Terpeneol 8007-35-0, Terpinylacetate 9000-69-5,  
 pectin 9000-92-4, Amylase 9001-33-6, Ficin 9001-62-1, Lipase  
 9001-73-4, Papain 9001-75-6, Pepsin 9001-92-7, Protease 9001-98-3,  
 Chymosin 9002-07-7, Trypsin 9003-99-0, Peroxidase 9004-07-3,  
 Chymotrypsin 9004-08-4, Cathepsin 9005-32-7, Alginic acid 9005-53-2,  
 Lignin 9013-05-2, Phosphatase 9013-19-8, Isomerase 9013-79-0,  
 Esterase 9015-85-4, DNA-Ligase 9027-41-2, Hydrolase 9031-55-4,  
 Carboxylase 9031-56-5, Ligase 9032-92-2, Glycosidase 9035-73-8,  
 Oxidase 9035-82-9, Dehydrogenase 9037-29-0, Oxygenase 9047-61-4,  
 Transferase 9055-04-3, Lyase 9055-15-6, Oxidoreductase 10032-05-0,  
 Heptanaldimethyl acetal **10043-52-4, Calcium**  
**chloride** 10124-49-9, Iron sulfate 15431-40-0, Magnesium  
 ascorbate 25917-35-5, Hexanol 26628-22-8, Sodium azide 33735-91-0,

Guanine hydrochloride 36653-82-4, 1-Hexadecanol 37259-52-2, DNA-Ligase  
50984-52-6, Anisaldehyde 84843-69-6, Tryptose 119129-70-3, Ananain  
150977-36-9, Bromelain 159519-79-6, Brenzcatechin 183256-98-6,  
Fornesol 186209-48-3, Nonadienol

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological  
study); USES (Uses)

(symbiotic regenerative compns. contg. microorganisms)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Araki, S; US 5741494 A 1998
- (2) Heppner, N; DE 3938233 A 1990
- (3) Merck Patent Gmbh; DE 19830528 A 1999 HCAPLUS
- (4) Prasad, N; US 6080401 A 2000
- (5) Procter & Gamble; WO 9729762 A 1997

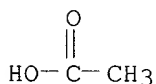
IT 62-54-4, Calciumacetate 7487-88-9, Magnesium-  
sulfate 10043-52-4, Calcium chloride

RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological  
study); USES (Uses)

(symbiotic regenerative compns. contg. microorganisms)

RN 62-54-4 HCAPLUS

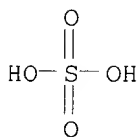
CN Acetic acid, calcium salt (8CI, 9CI) (CA INDEX NAME)



1/2 Ca

RN 7487-88-9 HCAPLUS

CN Sulfuric acid magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



Mg

RN 10043-52-4 HCAPLUS

CN Calcium chloride (CaCl<sub>2</sub>) (9CI) (CA INDEX NAME)

Cl-Ca-Cl

L96 ANSWER 3 OF 31 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:31268 HCAPLUS

DN 134:85345

TI Animal **feed** composition made from settable liquid ingredients

IN Stansby, Mark Richard

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

X

↓

PA Ridley Research and Development Corporation Limited, Australia  
 SO PCT Int. Appl., 19 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A23K001-00  
 ICS A23K001-20; A23K001-22  
 CC 17-12 (Food and **Feed** Chemistry)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001001790	A1	20010111	WO 1999-AU541	19990701
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 9945931 A1 20010122 AU 1999-45931 19990701				
PRAI	WO 1999-AU541	A	19990701		
AB	A method of forming animal <b>feed</b> licking blocks involving mixing at least one animal <b>feed</b> component with <b>magnesium</b> <b>sulfate</b> heptahydrate and reactive <b>magnesium</b> <b>oxide</b> to form a compn., adjusting the water level of the compn. to a level to allow the compn. to be poured into molds (up to .apprx.30%), and allowing the compn. to set in the molds. The formulation contains 1-50% of Mg sulfate and reactive <b>MgO</b> each (preferably 2-15% each), in a ratio of 1:1 to 1:2; increasing the proportion of <b>MgO</b> increases the resulting hardness of the blocks. The blocks can contain 5-80% added nutrients (salt, urea, minerals, vitamins), up to 50% <b>feed</b> ingredients (meals, <b>molasses</b> , animal and vegetable fats, etc.), up to 25% medicating agents (antimicrobials, anthelmintics, insecticides, probiotics, enzymes), and other components (clay, bentonite).				
ST	<b>feed</b> lick block prepn <b>magnesium oxide</b>				
	sulfate				
IT	Polyphosphoric acids				
	RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (ammonium salts; <b>feed</b> licking block compn. and prepn. from settable liq. ingredients contg. <b>magnesium oxide</b> and sulfate)				
IT	<b>Cottonseed</b> meal				
	<b>Feed</b>				
	Lupine (Lupinus)				
	<b>Molasses</b>				
	Soybean meal				
	(feed licking block compn. and prepn. from settable liq. ingredients contg. <b>magnesium oxide</b> and sulfate)				
IT	Limestone, biological studies				
	Mineral elements, biological studies				
	Soybean oil				
	Vitamins				
	RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (feed licking block compn. and prepn. from settable liq. ingredients contg. <b>magnesium oxide</b> and sulfate)				
IT	57-13-6, Urea, biological studies 471-34-1, <b>Calcium</b>				
	<b>carbonate</b> , biological studies 1309-48-4,				

**Magnesium oxide**, biological studies 3983-19-5, Calcium  
bicarbonate 7647-14-5, Salt, biological studies 7722-88-5 7757-93-9,  
Dicalcium **phosphate 7778-18-9, Calcium**  
**sulfate** 10034-99-8, **Magnesium sulfate**  
heptahydrate

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**feed** licking block compn. and prepn. from settable liq.  
ingredients contg. **magnesium oxide** and sulfate)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

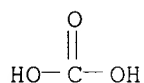
- (1) Landriven, H; FR A2478954 1981
- (2) Maple Leaf Foods Inc; AU A4617896 1996
- (3) Martin Marietta Corporation; EP 231079 1987 HCAPLUS
- (4) Martin Marietta Corporation; WO A8801475 1988
- (5) Martin Marietta Magnesia Specialties Inc; WO 9403073 1994 HCAPLUS
- (6) Muller, F; DE A1925180 1970
- (7) Webb; US 5786007 1998 HCAPLUS

IT 471-34-1, **Calcium carbonate**, biological  
studies 1309-48-4, **Magnesium oxide**,  
biological studies 7778-18-9, **Calcium sulfate**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**feed** licking block compn. and prepn. from settable liq.  
ingredients contg. **magnesium oxide** and sulfate)

RN 471-34-1 HCAPLUS

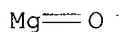
CN Carbonic acid calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



Ca

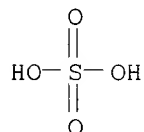
RN 1309-48-4 HCAPLUS

CN Magnesium oxide (MgO) (9CI) (CA INDEX NAME)



RN 7778-18-9 HCAPLUS

CN Sulfuric acid, calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



Ca

AN 2001-600659 [68] WPIX  
 DNC C2001-178053  
 TI **Feed** composition for milk cow to produce milk having high milk fat content.  
 DC D13  
 IN KIM, Y G  
 PA (CHEI-N) CHEIL JEDANG CO; (CHEI-N) CHEIL FOODS & CHEM INC  
 CYC 1  
 PI KR 2001037990 A 20010515 (200168)\* A23K001-16  
 KR 317947 B 20020118 (200254) A23K001-16  
 ADT KR 2001037990 A KR 1999-45781 19991021; KR 317947 B KR 1999-45781 19991021  
 FDT KR 317947 B Previous Publ. KR 2001037990  
 PRAI KR 1999-45781 19991021  
 IC ICM A23K001-16  
 AB KR2001037990 A UPAB: 20011121

NOVELTY - A **feed** composition for a milk cow is provided to produce milk having a high milk fat content by adding soybean hulls, sodium bicarbonate and **calcium acetate**.

DETAILED DESCRIPTION - General **feed** composition contains 16wt.% of corn, 15wt.% of wheat, 34.6wt.% of meal of coconut, **cottonseed**, soybean, etc., 10wt.% of wheat husks, 0.79wt.% of limestone, 0.75wt.% of calcium **phosphate**, 0.91wt.% of salt, 1.5wt.% of beef tallow, 1.3wt.% of a mineral additive, 0.05wt.% of a vitamin additive and 5wt.% of **molasses**. The **feed** composition for the invention is manufactured by adding additives like 13wt.% of soybean hulls, 0.8wt.% of sodium bicarbonate and 0.3wt.% of **calcium acetate** to the general **feed** composition.

Dwg.0/0

FS CPI  
 FA AB  
 MC CPI: D03-B

L96 ANSWER 5 OF 31 HCAPLUS COPYRIGHT 2002 ACS

AN 2001:679188 HCAPLUS

DN 136:230579

TI A comparative study of the adsorption of amino acids on to calcium minerals found in renal **calculi**

AU Fleming, David E.; Van Bronswijk, Wilhelm; Ryall, Rosemary Lyons

CS School of Applied Chemistry, Curtin University of Technology, Perth, WA 6845, Australia

SO Clinical Science (2001), 101(2), 159-168

CODEN: CSCIAE; ISSN: 0143-5221

PB Portland Press Ltd.

DT Journal

LA English

CC 14-12 (Mammalian Pathological Biochemistry)

Section cross-reference(s): 34

AB To assess the binding of individual amino acids to the principal calcium minerals found in human kidney stones, the adsorption of 20 amino acids on to calcium oxalate monohydrate,  $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$ ,  $\text{Ca}_3(\text{PO}_4)_2$  and  $\text{Ca}_5(\text{PO}_4)_3\text{OH}$  crystals was detd. over the physiol. urinary pH range (pH 5-8) in aq. solns. All amino acids adsorbed most strongly at pH 5, and this decreased in all cases as the pH was increased. The amino acids which adsorbed most strongly were aspartic acid, **glutamic acid** and .gamma.-carboxyglutamic acid, with the last displaying the strongest affinity. All amino acids bound more avidly to calcium oxalate monohydrate than to any of the **phosphate** minerals. Adsorption on to  $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$  was generally higher than for  $\text{Ca}_3(\text{PO}_4)_2$  and  $\text{Ca}_5(\text{PO}_4)_3\text{OH}$ , for which all amino acids, with the exception of .gamma.-carboxyglutamic

acid, had only a weak affinity. The binding affinity of these acids is thought to be due to their zwitterions being able to adopt conformations in which two carboxyl groups, and possibly the amino group, can interact with the mineral surface without further rotation. The strong binding affinity of di- and tri-carboxylic acids for calcium stone minerals indicates that proteins rich in these amino acids are more likely to play a functional role in stone pathogenesis than those possessing only a few such residues. These findings, as well as the preferential adsorption of the amino acids for calcium oxalate monohydrate rather than calcium **phosphate** minerals, have ramifications for research aimed at discovering the true role of proteins in stone formation and for potential application in the design of synthetic peptides for use in stone therapy.

ST

IT

Adsorption

**Calculi**, renal

Human

Zwitterions

(adsorption of amino acids on to calcium minerals found in human renal **calculi**)

IT

Amino acids, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(adsorption of amino acids on to calcium minerals found in human renal **calculi**)

IT

56-40-6, Glycine, biological studies 56-41-7, L-Alanine, biological studies 56-45-1, L-Serine, biological studies 56-84-8, L-Aspartic acid, biological studies **56-86-0, L-Glutamic acid**, biological studies 56-87-1, L-Lysine, biological studies 56-89-3, L-Cystine, biological studies 60-18-4, L-Tyrosine, biological studies 61-90-5, L-Leucine, biological studies 63-68-3, L-Methionine, biological studies 63-91-2, L-Phenylalanine, biological studies 71-00-1, L-Histidine, biological studies 72-18-4, L-Valine, biological studies 72-19-5, L-Threonine, biological studies 73-32-5, L-Isoleucine, biological studies 74-79-3, L-Arginine, biological studies 147-85-3, L-Proline, biological studies 327-57-1, L-Norleucine 5794-28-5, Calcium oxalate monohydrate 7758-87-4, Calcium **phosphate** (Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>) 7789-77-7, Calcium **phosphate** (CaHPO<sub>4</sub>) dihydrate 12167-74-7, **Calcium hydroxide phosphate** (Ca<sub>5</sub>(OH)(PO<sub>4</sub>)<sub>3</sub>) 40967-85-9, Methionine, sulfate 56271-99-9, .gamma.-Carboxyglutamic acid

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(adsorption of amino acids on to calcium minerals found in human renal **calculi**)

RE.CNT

40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Addadi, L; Angew Chem Int Ed Eng 1992, V31, P153
- (2) Addadi, L; Mol Cryst Liq Cryst 1986, V134, P305 HCAPLUS
- (3) Aizenberg, J; Connect Tissue Res 1996, V34, P255 HCAPLUS
- (4) Albeck, S; Connect Tissue Res 1996, V35, P365 HCAPLUS
- (5) Asplin, J; Kidney Int 1998, V53, P194 HCAPLUS
- (6) Azoury, R; Urol Res 1986, V14, P295 HCAPLUS
- (7) Binette, J; Scanning Microsc 1996, V10, P509 HCAPLUS
- (8) Boyce, W; Am J Med 1968, V45, P673 HCAPLUS
- (9) Boyce, W; J Urol 1956, V76, P213 HCAPLUS
- (10) Callejas, F; J Colloid Interface Sci 1990, V135, P154
- (11) Collette, C; Clin Chim Acta 1991, V204, P43
- (12) de Water, R; Am J Kidney Dis 1999, V33, P761 HCAPLUS
- (13) Doyle, I; Clin Chem 1991, V37, P1589 HCAPLUS
- (14) Ebrahimpour, A; Langmuir 1991, V7, P557
- (15) Fleming, D; Kidney Stones 1999, P359
- (16) Gray, A; Invest Urol 1976, V13, P387

- (17) Grover, P; Clin Chim Acta 1990, V190, P223 HCAPLUS
- (18) Grover, P; Eur J Biochem 1998, V253, P637 HCAPLUS
- (19) Heuer, A; Science 1992, V255, P1098 HCAPLUS
- (20) Khan, S; J Urol 1997, V157, P376 HCAPLUS
- (21) Kohri, K; Eur Urol 1990, V17, P173 MEDLINE
- (22) Kohri, K; Int Urol Nephrol 1989, V21, P9 MEDLINE
- (23) Lide, D; CRC Handbook of Chemistry and Physics, 80th edn 1999-2000, P7-1
- (24) Lieske, J; Am J Physiol 1995, V268, PF604 HCAPLUS
- (25) Lieske, J; Nephron 1999, V81, P8 HCAPLUS
- (26) McGeown, M; J Urol 1957, V78, P318 HCAPLUS
- (27) Meyer, J; Invest Urol 1975, V13, P36 HCAPLUS
- (28) Min, W; Kidney Int 1998, V53, P189 HCAPLUS
- (29) Nagy, I; J Phys Chem 2000, V104, P6834
- (30) Noszal, B; Anal Chem 1989, V61, P2631 HCAPLUS
- (31) Prien, E; Am J Med 1968, V45, P654 HCAPLUS
- (32) Ryall, R; Clin Sci 1995, V89, P533 HCAPLUS
- (33) Ryall, R; Mol Urol 2000, V4, P391 HCAPLUS
- (34) Ryall, R; Pediatr Nephrol 1996, V10, P656 MEDLINE
- (35) Ryall, R; World J Urol 1997, V15, P155 HCAPLUS
- (36) Shiraga, H; Proc Natl Acad Sci U S A 1992, V89, P426 HCAPLUS
- (37) van de Loo, P; Biochem Biophys Res Commun 1987, V142, P113 HCAPLUS
- (38) Warpehoski, M; Calcif Tissue Int 1981, V33, P211 HCAPLUS
- (39) Weiner, S; J Mater Chem 1997, V7, P689 HCAPLUS
- (40) Yoshida, O; Urol Int 1990, V45, P104 MEDLINE

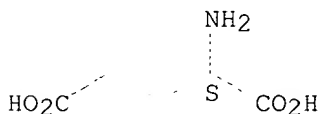
IT 56-86-0, L-Glutamic acid, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(adsorption of amino acids on to calcium minerals found in human renal  
calculi)

RN 56-86-0 HCAPLUS

CN L-Glutamic acid (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L96 ANSWER 6 OF 31 HCAPLUS COPYRIGHT 2002 ACS DUPLICATE 1  
 AN 1999:401521 HCAPLUS  
 DN 131:31318  
 TI **Feed** containing **molasses** bentonite and zeolite  
 IN Kemp, Philip W.; Nougher, Thomas Hall  
 PA Australia  
 SO U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 368,723, abandoned.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC A23K001-165  
 NCL 424442000  
 CC 17-12 (Food and **Feed** Chemistry)  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5908634	A	19990601	US 1996-858175	19961114
	WO 9216114	A1	19921001	WO 1992-AU104	19920310
	W: AU, JP, KR, US				
PRAI	WO 1992-AU104		19920310		

	US 1993-969846	19930719
	US 1995-368723	19950104
	AU 1991-5042	19910312
	AU 1991-91	19911218

AB An alk. animal **feed**, in granular or solid form, with a pH .gtoreq.7.5, comprising dunder, dunder and **molasses**, or dunder and **molasses** byproducts is mixed with sorptive materials, including bentonite and zeolite. Hydrated lime may be added as a source of calcium, to improve pellet quality, for moisture absorbency and for pH control. Cereal grains, trace elements, bypass proteins and other additives may be included in the mix to tailor the animal **feed** to the user's requirements.

ST **feed molasses** bentonite zeolite dunder

IT Fermentation wastes  
(dunder; **feed** contg. **molasses** bentonite and zeolite)

IT Cereal (grain)  
**Feed**  
**Molasses**  
(**feed** contg. **molasses** bentonite and zeolite)

IT Bentonite, biological studies  
**Phosphate** rock  
Trace element nutrients  
Vitamins  
Zeolite-group minerals  
Zeolites (synthetic), biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**feed** contg. **molasses** bentonite and zeolite)

IT **Seed**  
(oilseed; **feed** contg. **molasses** bentonite and zeolite)

IT Proteins, general, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(rumen bypass; **feed** contg. **molasses** bentonite and zeolite)

IT Drugs  
(veterinary; **feed** contg. **molasses** bentonite and zeolite)

IT 57-13-6, Urea, biological studies 1305-62-0, Hydrated lime, biological studies 1309-48-4, **Magnesium oxide**, biological studies 7723-14-0, Phosphorus, biological studies 7757-93-9, Dicalcium **phosphate** 7783-28-0, Diammonium **phosphate** 10103-46-5, Calcium **phosphate**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**feed** contg. **molasses** bentonite and zeolite)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Bass; US 3983255 1976 HCAPLUS

(2) Morishita; US 4135943 1979 HCAPLUS

(3) Schroeder; US 4160041 1979 HCAPLUS

IT 1305-62-0, Hydrated lime, biological studies 1309-48-4, **Magnesium oxide**, biological studies 7783-28-0, Diammonium **phosphate**  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(**feed** contg. **molasses** bentonite and zeolite)

RN 1305-62-0 HCAPLUS

CN Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)

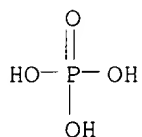


HO-Ca-OH

RN 1309-48-4 HCAPLUS  
CN Magnesium oxide (MgO) (9CI) (CA INDEX NAME)

Mg=O

RN 7783-28-0 HCAPLUS  
CN Phosphoric acid; diammonium salt (8CI, 9CI) (CA INDEX NAME)



2 NH<sub>3</sub>

L96 ANSWER 7 OF 31 HCAPLUS COPYRIGHT 2002 ACS  
AN 1999:355706 HCAPLUS  
DN 130:351474  
TI Food or nutritional supplement, preparation method and uses  
IN Briend, Andre; Lescanne, Michel  
PA Nutriset, Fr.; Orstom  
SO PCT Int. Appl., 29 pp.  
CODEN: PIXXD2  
DT Patent  
LA French  
IC ICM A23L001-30  
ICS A23L001-36  
CC 17-6 (Food and Feed Chemistry)  
Section cross-reference(s): 18, 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9926490	A1	19990603	WO 1998-FR2469	19981119
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2771259	A1	19990528	FR 1997-14655	19971121
FR 2771259	B1	20000128		
CA 2312025	AA	19990603	CA 1998-2312025	19981119
AU 9912447	A1	19990615	AU 1999-12447	19981119
EP 1032280	A1	20000906	EP 1998-955695	19981119
EP 1032280	B1	20011121		
R: BE, DE, DK, ES, FR, GB, NL, IE				

	ES 2168157	T3	20020601	ES 1998-955695	19981119
	US 6346284	B1	20020212	US 2000-554847	20000714
PRAI	FR 1997-14655	A	19971121		
	WO 1998-FR2469	W	19981119		

AB The invention concerns a complete food or nutritional supplement contg. at most 10 % of water by wt., preferably at most 5 % of water, and more preferably at most 2 % of water, with low osmolality, oxidn.-stable, comprising a mixt. of quality food products, said mixt. being coated by at least a substance rich in lipids derived optionally from oleaginous **seeds.**

ST food nutritional supplement lipid coating

IT Fats and Glyceridic oils, biological studies  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (animal; food or nutritional supplement prepn. and uses)

IT Cocoa products  
 (beans; food or nutritional supplement prepn. and uses)

IT Flours and Meals  
 (corn; food or nutritional supplement prepn. and uses)

IT Food  
 Food  
 (dyes; food or nutritional supplement prepn. and uses)

IT Almond (Prunus amygdalus)  
 Cassava (Manihot esculenta)  
 Coconut (Cocos nucifera)  
 Dietary energy  
 Emulsifying agents  
 Food viscosity  
 Hazel (Corylus)  
 Health food  
 Millet  
 Oat  
 Odor and Odorous substances  
 Peanut (Arachis hypogaea)  
 Rice (Oryza sativa)  
 Soybean meal  
 Sweetening agents  
 Walnut  
 Wheat  
 (food or nutritional supplement prepn. and uses)

IT Carbohydrates, biological studies  
 Enzymes, biological studies  
 Fats and Glyceridic oils, biological studies  
 Fatty acids, biological studies  
 Proteins, general, biological studies  
 RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (food or nutritional supplement prepn. and uses)

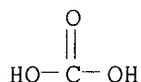
IT Lipids, biological studies  
 RL: FFD (Food or feed use); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)  
 (food or nutritional supplement prepn. and uses)

IT Mineral elements, biological studies  
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (food or nutritional supplement prepn. and uses)

IT Vitamins  
 RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (food or nutritional supplement prepn. and uses)

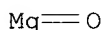
IT Dyes  
 Dyes

(food; food or nutritional supplement prepn. and uses)  
IT Food  
(infant; food or nutritional supplement prepn. and uses)  
IT Coating materials  
(lipid; food or nutritional supplement prepn. and uses)  
IT Corn  
(meal; food or nutritional supplement prepn. and uses)  
IT Pistachio (Pistacia vera)  
(nut; food or nutritional supplement prepn. and uses)  
IT **Seed**  
(oilseed; food or nutritional supplement prepn. and uses)  
IT Milk  
**Whey**  
(powd.; food or nutritional supplement prepn. and uses)  
IT Diet  
(therapeutic; food or nutritional supplement prepn. and uses)  
IT Fats and Glyceridic oils, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(vegetable; food or nutritional supplement prepn. and uses)  
IT Milk preparations  
(yogurt, powd.; food or nutritional supplement prepn. and uses)  
IT 50-81-7, Vitamin C, biological studies 50-99-7, D-Glucose, biological studies 57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 57-48-7, D-Fructose, biological studies 57-50-1, Sucrose, biological studies 59-43-8, Vitamin B1, biological studies 68-19-9, Vitamin B12 79-83-4, Vitamin B5 83-88-5, Vitamin B2, biological studies 124-07-2, Caprylic acid, biological studies 142-62-1, Caproic acid, biological studies 143-07-7, Lauric acid, biological studies 334-48-5, Capric acid **471-34-1, Calcium carbonate**, biological studies 506-30-9, Arachidic acid 544-63-8, Myristic acid, biological studies **1309-48-4, Magnesium oxide**, biological studies 1314-13-2, Zinc oxide, biological studies 1406-16-2, Vitamin D 1406-18-4, Vitamin E 7447-40-7, Potassium chloride, biological studies 7758-11-4, Dipotassium **phosphate** 7758-87-4, Tricalcium **phosphate** 7758-98-7, Copper sulfate, biological studies 8059-24-3, Vitamin B6 9000-92-4, Amylase 9050-36-6, Maltodextrin 11032-50-1, Vitamin PP 11096-55-2, Vitamin B9 11103-57-4, Provitamin A 12001-79-5, Vitamin K 27104-13-8 27213-43-0 28933-89-3, Eicosenoic acid 28984-77-2 64060-35-1, Vitamin B8  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(food or nutritional supplement prepn. and uses)  
IT 9005-25-8, Starch, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(potato; food or nutritional supplement prepn. and uses)  
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE  
(1) Abbott Laboratories; WO 9414458 A 1994 HCAPLUS  
(2) Arees, S; GB 2242342 A 1991  
(3) Ferrero; DE 2345045 A 1975  
(4) Milchwerke, W; EP 0442140 A 1991  
(5) Univ Otago; WO 9705789 A 1997 HCAPLUS  
IT **471-34-1, Calcium carbonate**, biological studies **1309-48-4, Magnesium oxide**, biological studies  
RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
(food or nutritional supplement prepn. and uses)  
RN 471-34-1 HCAPLUS  
CN Carbonic acid calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



Ca

RN 1309-48-4 HCAPLUS  
CN Magnesium oxide (MgO) (9CI) (CA INDEX NAME)



L96 ANSWER 8 OF 31 WPIX (C) 2002 THOMSON DERWENT

AN 2000-024010 [03] WPIX

CR 1999-459026 [39]

DNC C2000-006065

TI Producing animal **feed** block compositions made from settable liquid ingredients useful as dietary supplements.

DC D13

IN STANSBY, M R

PA (RIDL-N) RIDLEY RES & DEV CORP LTD

CYC 1

PI AU 9943527 A 19991021 (200003)\* 18p A23K001-00

AU 725349 B 20001012 (200055) A23K001-00

ADT AU 9943527 A Div ex AU 1998-80873 19980824, AU 1999-43527 19990810; AU 725349 B Div ex AU 1998-80873 19980824, AU 1999-43527 19990810

FDT AU 9943527 A Div ex AU 707606; AU 725349 B Div ex AU 707606, Previous Publ. AU 9943527

PRAI AU 1998-80873 19980824; AU 1999-43527 19990810

IC ICM A23K001-00

AB AU 9943527 A UPAB: 20001102

NOVELTY - A method (I) of forming a shaped, solid animal **feed** block, which comprises mixing 1 or more animal **feed** components with **magnesium sulfate** and reactive **magnesium**

**oxide** and adjusting the water content of the composition to allow it to be poured into a mold, where it is then at least partially set.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a shaped, solid animal **feed** block prepared by the method (I).

USE - (I) may be used for producing animal **feed** blocks.

ADVANTAGE - The use of **feed** blocks allows free choice in **feeding** and reduces the labor required for the **feeding** out process. Animal **feed** blocks are may also be made weather resistant, do not require sheltered **feeding** locations and can easily be transported from one site to another. The method is particularly suitable for the production of salt enriched blocks with the required hardness, palatability and weatherability and blocks of up to 1000 kg can be produced. The use of **magnesium sulfate** and reactive **magnesium oxide** as setting agents in (I) allows the production of **feed** blocks of acceptable weatherability and hardness while still allowing the incorporation of a wide range of other additives without compromising the durability of the blocks. The blocks are quick and simple to produce (i.e. simple mixing of ingredients to form a slurry which then sets) without the need for high pressures, heating or pelletizing the product to form a block, and therefore does not require

high capital expenditure or specialized equipment. The water content of the blocks and, hence their properties can be varied by altering the mix of additives or by altering the water content. Additionally, the blocks produced set very quickly (e.g. blocks containing 30% or less of **molasses** typically set within 3 to 24 hours).

Dwg.0/0

FS CPI

FA AB

MC CPI: D03-G01; D03-G06

L96 ANSWER 9 OF 31 HCAPLUS COPYRIGHT 2002 ACS

AN 1996:605535 HCAPLUS

DN 125:246155

TI Particulate **feed** supplement

IN Steckley, J. David; Jebelian, Varouj

PA Maple Leaf Foods Inc., Can.

SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A23K001-00

CC 17-12 (Food and **Feed** Chemistry)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9625055	A1	19960822	WO 1996-CA92	19960216
	W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI			
	RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR			
	CA 2213219	AA	19960822	CA 1996-2213219	19960216
	AU 9646178	A1	19960904	AU 1996-46178	19960216
PRAI	US 1995-389770		19950216		
	WO 1996-CA92		19960216		

AB A particulate **feed** supplement is disclosed which comprises: from about 25% to about 90% by wt. of a flavor agent; from 10% to about 75% by wt. of a suspending agent; and from about 0.4% to about 4% by wt. of a dispersing agent and, optionally, from 0 to about 0.5% by wt. of a wetting agent. The particulate **feed** supplement may be readily converted to a **feed** supplement on-site, thereby obviating transportation costs assocd. with conventional liq. **feed** supplements.

ST **feed** supplement flavoring suspending dispersing agent

IT Dispersing agents

Flavoring materials

Gums and Mucilages

**Molasses**

Peppermint

**Whey**

Yeast

Yucca schidigera

(compn. for particulate **feed** supplement)

IT Bentonite, biological studies

Clays, biological studies

Kaolin, biological studies

Kieselguhr

Proteins, biological studies

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)

(compn. for particulate **feed** supplement)

- IT Apple  
(ext.; compn. for particulate **feed** supplement)
- IT Cereal  
(grain; compn. for particulate **feed** supplement)
- IT Corn  
(**liquor**, steep; compn. for particulate **feed** supplement)
- IT Anise  
(**seed**; compn. for particulate **feed** supplement)
- IT Fenugreek  
(**seeds**; compn. for particulate **feed** supplement)
- IT Fennel  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study);  
USES (Uses)  
(**seeds**; compn. for particulate **feed** supplement)
- IT **Feed**  
(supplement; compn. for particulate **feed** supplement)
- IT Essential oils  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study);  
USES (Uses)  
(anise, compn. for particulate **feed** supplement)
- IT **Molasses**  
(beet, compn. for particulate **feed** supplement)
- IT **Molasses**  
(blackstrap, compn. for particulate **feed** supplement)
- IT Wastes  
(brewery, compn. for particulate **feed** supplement)
- IT **Molasses**  
(citrus, compn. for particulate **feed** supplement)
- IT Essential oils  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study);  
USES (Uses)  
(clove, compn. for particulate **feed** supplement)
- IT **Molasses**  
(corn, compn. for particulate **feed** supplement)
- IT Essential oils  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study);  
USES (Uses)  
(nutmeg, compn. for particulate **feed** supplement)
- IT Essential oils  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study);  
USES (Uses)  
(wintergreen, compn. for particulate **feed** supplement)
- IT 105-54-4, Ethyl butyrate 121-32-4, Ethyl vanillin 156-54-7, Sodium butyrate 470-82-6, Eucalyptol 8062-15-5, Lignin sulfonate 9034-32-6, Hemicellulose  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); BIOL (Biological study);  
USES (Uses)  
(compn. for particulate **feed** supplement)
- IT 64-17-5, Ethanol, biological studies 97-65-4, biological studies 142-47-2, Monosodium glutamate 471-34-1, **Calcium carbonate**, biological studies 1184-64-1, Cupric carbonate 1305-78-8, **Calcium oxide**, biological studies 1309-48-4, **Magnesium oxide**, biological studies

1314-13-2, Zinc oxide, biological studies 1406-16-2, Vitamin D  
 1406-18-4, Vitamin E 3486-35-9, Zinc carbonate 5700-49-2,  
 Ethylenediamine dihydroiodide 7439-89-6, Iron, biological studies  
 7439-95-4, Magnesium, biological studies 7439-96-5, Manganese,  
 biological studies 7440-09-7, Potassium, biological studies 7440-23-5,  
 Sodium, biological studies 7440-48-4, Cobalt, biological studies  
 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological  
 studies 7440-70-2, Calcium, biological studies 7447-39-4, Cupric  
 chloride, biological studies 7447-40-7, Potassium chloride, biological  
 studies **7487-88-9, Magnesium sulfate**,  
 biological studies 7542-09-8, Cobalt carbonate 7553-56-2, Iodine,  
 biological studies 7646-79-9, Cobalt chloride, biological studies  
 7646-85-7, Zinc chloride, biological studies 7647-14-5, Sodium chloride,  
 biological studies **7664-38-2, Phosphoric acid**  
 , biological studies 7681-11-0, Potassium iodide, biological studies  
 7681-65-4, Cuprous iodide 7704-34-9, Sulfur, biological studies  
**7722-76-1, Monoammonium phosphate** 7722-88-5,  
 Tetrasodium pyrophosphate 7723-14-0, Phosphorus, biological studies  
 7733-02-0, Zinc sulfate 7758-16-9 7758-98-7, Copper sulfate,  
 biological studies 7778-80-5, Potassium sulfate, biological studies  
 7782-49-2, Selenium, biological studies 7789-80-2, Calcium iodate  
 10102-18-8, Sodium selenite 10124-43-3 11103-57-4, Vitamin A  
 11129-60-5, Manganese oxide 12001-76-2, Vitamin B 12001-79-5, Vitamin  
 K 13410-01-0, Sodium selenate 40816-51-1, Zinc methionine  
 181826-79-9

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (compn. for particulate **feed** supplement)

IT 1318-93-0, Montmorillonite, biological studies 9000-30-0, Guar gum  
 11138-66-2, Xanthan gum 12174-11-7, Attapulgit

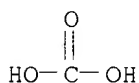
RL: FFD (Food or feed use); PEP (Physical, engineering or chemical  
 process); BIOL (Biological study); PROC (Process); USES (Uses)  
 (compn. for particulate **feed** supplement)

IT **471-34-1, Calcium carbonate**, biological  
 studies 1305-78-8, **Calcium oxide**, biological  
 studies 1309-48-4, **Magnesium oxide**,  
 biological studies **7487-88-9, Magnesium**  
**sulfate**, biological studies **7664-38-2,**  
**Phosphoric acid**, biological studies **7722-76-1,**  
**Monoammonium phosphate**

RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)  
 (compn. for particulate **feed** supplement)

RN 471-34-1 HCAPLUS

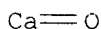
CN Carbonic acid calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



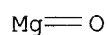
Ca

RN 1305-78-8 HCAPLUS

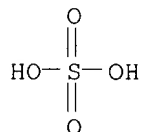
CN Calcium oxide (CaO) (9CI) (CA INDEX NAME)



RN 1309-48-4 HCAPLUS  
CN Magnesium oxide (MgO) (9CI) (CA INDEX NAME)

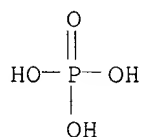


RN 7487-88-9 HCAPLUS  
CN Sulfuric acid magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)

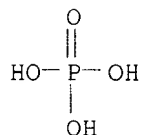


Mg

RN 7664-38-2 HCAPLUS  
CN Phosphoric acid (7CI, 8CI, 9CI) (CA INDEX NAME)



RN 7722-76-1 HCAPLUS  
CN Phosphoric acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)



NH<sub>3</sub>

L96 ANSWER 10 OF 31 CABA COPYRIGHT 2002 CABI  
AN 96:88265 CABA  
DN 961405327  
TI Metabolic changes and nutrient repletion in lambs provided with  
electrolyte solutions before and after **feed** and water  
deprivation  
AU Cole, N. A.  
CS Conservation and Production Research Laboratory, ARS, USDA, Bushland, TX  
79012, USA.  
SO Journal of Animal Science, (1996) Vol. 74, No. 2, pp. 287-294. 32 ref.

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ISSN: 0021-8812

DT Journal

LA English

AB Eight crossbred lambs (average body weight 35 kg) were subject to a 10-day pre-deprivation phase, a 3-day deprivation phase (**feed** and water withheld) and a 7-day realimentation phase in an 8 x 8 Latin square design. Lambs were fed on a pelleted diet (59% **cottonseed** hulls, 14% maize, 15% **cottonseed** meal, 5% lucerne, 5% **molasses** and 2% minerals/vitamins) 600 g/day before and after the 3-day deprivation phase. During the last 4 days of the deprivation phase lambs were provided ad libitum with deionized water or an electrolyte solution (ES1: sodium chloride, 2.0; potassium carbonate, 2.8; **magnesium sulfate**, 2.0; amino acid mixture, 0.45 g/10 litre; and **phosphoric acid** to pH 7.0). During realimentation, lambs were provided with deionized water, ES1, ES2 (twice the concentrations of ES1) or ES3 (sodium chloride 2.0; potassium carbonate, 8.0; **magnesium sulfate**, 4.0; amino acid mixture from ES1, 0.45 g/10 litre; and **phosphoric acid** to pH 7.0). Lambs given ES1 during the pre-deprivation phase had higher sodium, magnesium and zinc retentions during the pre-deprivation phase, higher Na and Mg losses during the deprivation phase, and higher cumulative Na, copper and iron retentions than lambs given deionized water during the pre-deprivation phase. Compared to lambs given water, lambs given ES1 solution during the realimentation phase had higher Na retentions but similar potassium, Mg and water retentions. When the concentration of electrolytes in the solution was doubled (i.e., ES2 solution), Na, K and Mg retentions were higher than those of lambs given deionized water or ES1. The results suggest that as the length or severity of the stress period increases, the concentration of electrolytes in the electrolyte solution may need to be increased to improve nutrient balance.

CC LL510 Animal Nutrition (Physiology)

BT Ovis; Bovidae; ruminants; Artiodactyla; mammals; vertebrates; Chordata; animals

CT sodium; magnesium; zinc; copper; iron; water; electrolytes; lambs; deprivation; stress; minerals; water deprivation; solutions; retention; starvation; intake

RN 7440-23-5; 7439-95-4; 7440-66-6; 7440-50-8; 7439-89-6; 7732-18-5

ORGN sheep

L96 ANSWER 11 OF 31 HCAPLUS COPYRIGHT 2002 ACS

AN 1994:532688 HCAPLUS

DN 121:132688

TI Proteins, polysaccharides, and calcium compounds for processed foods

IN Kako, Masatake; Shigematsu, Kanji

PA Meiji Milk Prod Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A23L001-31

ICS A23L001-325

ICA A23L001-03

CC 17-6 (Food and **Feed** Chemistry)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 06133738	A2	19940517	JP 1992-307923	19921023
	JP 3124394	B2	20010115		

AB Blood proteins, polysaccharides (e.g., cellulose, starch, thickeners which are derived from seaweeds, **seeds**, microorganisms), and Ca

comps. such as  $\text{CaCl}_2$ ,  $\text{CaCO}_3$ ,  $\text{Ca}(\text{OH})_2$ , and  $\text{Ca phosphate}$  are added to **whey** proteins to give food additives. For example, the additives may be used in hamburger and fried foods.

ST protein polysaccharide calcium food additive

IT Food

(additives for, proteins and polysaccharides and calcium comps. as)

IT Polysaccharides, biological studies

RL: BIOL (Biological study)

(food additives contg. proteins and calcium comps. and)

IT Proteins, uses

RL: USES (Uses)

(of blood, food additives contg. polysaccharides and calcium comps. and)

IT **Whey**

(proteins of, food additives contg. polysaccharides and calcium comps. and)

IT 9004-34-6, Cellulose, uses 9005-25-8, Starch, biological studies

RL: USES (Uses)

(food additives contg. proteins and calcium comps. and)

IT 471-34-1, **Calcium carbonate**, biological

studies 1305-62-0, **Calcium hydroxide**, uses

7440-70-2, Calcium, biological studies 10043-52-4,

**Calcium chloride**, biological studies 10103-46-5

RL: BIOL (Biological study)

(food additives contg. proteins and polysaccharides and)

IT 471-34-1, **Calcium carbonate**, biological

studies 1305-62-0, **Calcium hydroxide**, uses

10043-52-4, **Calcium chloride**, biological

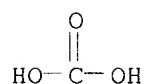
studies

RL: BIOL (Biological study)

(food additives contg. proteins and polysaccharides and)

RN 471-34-1 HCAPLUS

CN Carbonic acid calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



Ca

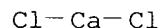
RN 1305-62-0 HCAPLUS

CN Calcium hydroxide ( $\text{Ca}(\text{OH})_2$ ) (9CI) (CA INDEX NAME)



RN 10043-52-4 HCAPLUS

CN Calcium chloride ( $\text{CaCl}_2$ ) (9CI) (CA INDEX NAME)



L96 ANSWER 12 OF 31 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 AN 1994:434716 BIOSIS  
 DN PREV199497447716  
 TI Improving the L-lysine productivity of *Brevibacterium* sp. P1-13.  
 AU Wang, Jyh-Shiou; Cheng, Wen-Ling; Chang, Chun-Chin; Liu, Yao-Tung  
 CS Dep. Biotechnol., Taiwan Sugar Res. Inst. Taiwan  
 SO Report of the Taiwan Sugar Research Institute, (1994) Vol. 0, No. 143, pp. 51-65.  
 ISSN: 0257-5493.  
 DT Article  
 LA Chinese  
 SL Chinese; English  
 AB In order to improve further the L-lysine productivity of *Brevibacterium* sp. P1-13 in raw sugar medium, the optimum conditions of main fermentation and **feeding** culture were investigated. The results revealed that increasing the K-2HPO-4 and decreasing the (NH-4)-2SO-4 concentrations during **seed** culture could produce higher L-lysine yield in main fermentation by P1-13 strain. In main fermentation, the optimum concentrations of **molasses** total sugar, betaine, K-2HPO-4, CaCO-3, citrate, catechol, (NH-4)-2SO-4, and hydrolysate of plant protein (HPP) were 3%, 10-2M, 0.01%, 1%, 0.02%, 10-4M, 1%, and 5%, respectively. After 6 hr in main fermentation, the **feeding** medium was added at a constant rate until 21% total sugar was reached while the concentrations of (NH-4)-2SO-4 HPP and **molasses** total sugar had to be adjusted at 3.5%, 6%, and 6%, respectively. Further experiments showed both L-lysine productivity and growth rate were significantly stimulated with a rise in cultivation temperature and a reduction in the initial (NH-4)-2SO-4 concentrations. With a fed-batch cultivation at 35 degree C, the L-lysine-HCl concentration within 40 hr approached 9.71%; and based on total sugar, yield approached 46.2%.  
 CC Biochemical Studies - General \*10060  
 Biochemical Studies - Proteins, Peptides and Amino Acids \*10064  
 Biochemical Studies - Carbohydrates \*10068  
 Biochemical Studies - Minerals \*10069  
 Metabolism - Proteins, Peptides and Amino Acids \*13012  
 Physiology and Biochemistry of Bacteria \*31000  
 Microbiological Apparatus, Methods and Media \*32000  
 Food and Industrial Microbiology - Biosynthesis, Bioassay and Fermentation \*39007  
 BC Irregular Nonsporing Gram-Positive Rods \*08890  
 IT Major Concepts  
 Biochemistry and Molecular Biophysics; Bioprocess Engineering;  
 Metabolism; Methods and Techniques; Physiology  
 IT Chemicals & Biochemicals  
 L-LYSINE; P1-13; DIPOTASSIUM HYDROGEN **PHOSPHATE**; AMMONIUM  
 SULFATE; BETAINE; **CALCIUM CARBONATE**; CITRATE;  
 CATECHOL  
 IT Miscellaneous Descriptors  
 AMMONIUM SULFATE; BETAINE; **CALCIUM CARBONATE**;  
 CATECHOL; CITRATE; DIPOTASSIUM HYDROGEN **PHOSPHATE**;  
**FEEDING CULTURE**; FERMENTATION CONDITIONS; **MOLASSES**  
 ORGN Super Taxa  
 Irregular Nonsporing Gram-Positive Rods: Eubacteria, Bacteria  
 ORGN Organism Name  
 irregular nonsporing gram-positive rods (Irregular Nonsporing  
 Gram-Positive Rods); *Brevibacterium* sp. (Irregular Nonsporing  
 Gram-Positive Rods)  
 ORGN Organism Superterms  
 bacteria; eubacteria; microorganisms  
 RN 56-87-1 (L-LYSINE)

76-13-1Q (P1-13)  
 34273-10-4Q (P1-13)  
 49539-88-0Q (P1-13)  
 7758-11-4 (DIPOTASSIUM HYDROGEN **PHOSPHATE**)  
 7783-20-2 (AMMONIUM SULFATE)  
 107-43-7 (BETAINES)  
**471-34-1 (CALCIUM CARBONATE)**  
 126-44-3 (CITRATE)  
 120-80-9Q (CATECHOL)  
 154-23-4Q (CATECHOL)

L96 ANSWER 13 OF 31 WPIX (C) 2002 THOMSON DERWENT

AN 1993-317484 [40] WPIX

DNC C1993-141133

TI New physiologically active cpd. inhibiting DNA polymerase alpha - is hexyl cyclopropyl heptanoic acid cyclic **phosphate**, useful as antitumour agent.

DC B03 D16

PA (MITU) MITSUBISHI KASEI CORP

CYC 1

PI JP 05230088 A 19930907 (199340)\* 13p C07F009-6574

JP 3195833 B2 20010806 (200147) 11p C07F009-6574

ADT JP 05230088 A JP 1992-262478 19920930; JP 3195833 B2 JP 1992-262478 19920930

FDT JP 3195833 B2 Previous Publ. JP 05230088

PRAI JP 1991-252181 19910930

IC ICM C07F009-6574

ICS C07F009-09; C12P009-00

ICA A61K031-665

ICI C12P009-00, C12R001:645

AB JP 05230088 A UPAB: 19931129

A physiologically active cpd. of formula (I) is new.

(I) may be prepd. by incubating a haploid phase myxamoeba of Physarum polycephalum MCI 2526 on a medium contg. a bacterium as **feed**, nutrition source (e.g. glucose, starch syrup, dextrin, sucrose, starch, **molasses**, animal or vegetable oil), nitrogen source (e.g. soybean flour, wheat embryo, **corn steep liquor**, **cotton seed**, meat extract, peptone, yeast extract, (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, NaNO<sub>2</sub>, urea) and mineral releasing Na, K, Ca, Mg, Co, Cl, **phosphate**, sulphate and other ions at 20-25 deg.C for 4-5 days. Before incubation, said organism may be cultured on an agar medium contg. Aerobacter aerogenes MCI 2517 (FERM P-11577) as **feed**. The medium is pref. agar medium prepd. (0.7 cm thickness) from 5.0 g glucose, 0.5 g yeast extract, 5.0 g bactopectone, 2.3 g KH<sub>2</sub>PO<sub>4</sub>, 1.5 g K<sub>2</sub>HPO<sub>4</sub>, 0.5 g **MgSO<sub>4</sub>.7H<sub>2</sub>O**, 30 g agar and 1 liter distilled water, on which Aerobacter aerogenes MCI 2517as **feed** is incubated at 24 deg.C for a day.

The prod. may be isolated from the culture broth by extn. with solvents (MeOH and MeOH/CHCl<sub>3</sub>), chromatography on ion exchange resin, adsorption or partition column chromatography, preparative thin layer chromatography, reverse phase high performance liq. chromatography, gel filtration, dialysis, and pptn.

USE/ADVANTAGE - (I) inhibits DNA polymerase-alpha and is useful as anti-tumour agent. In an example, (I) inhibits DNA polymerase-alpha of calf thymus at a rate of 90% in a test using activated DNA, deoxyribonucleotide triphosphates and tritium-labelled deoxythymidine triphosphate. (I) destroyed approx. 100% HeLa cell derived from cervical carcinoma at a conc. of 0.5-1 micro g/ml.

Dwg.0/0

FS CPI

FA AB; GI; DCN  
MC CPI: B05-B01M; B12-G01B2; B12-G07; D05-A02; D05-C

L96 ANSWER 14 OF 31 WPIX (C) 2002 THOMSON DERWENT

AN 1993-160951 [20] WPIX

DNC C1993-071036

TI Prodn. of L-isoleucine - by culture of Escherichia microorganism having resistance to an isoleucine analogue.

DC B05 D16 E16

IN KINO, K; KURATSU, Y

PA (KYOW) KYOWA HAKKO KOGYO CO LTD; (KYOW) KYOWA HAKKO KOGYO KK

CYC 9

PI EP 542487 A2 19930519 (199320)\* EN 7p C12P013-06

R: DE FR GB IT

JP 05130882 A 19930528 (199326) 5p C12P013-06

CA 2082347 A 19930512 (199330) C12P013-06

HU 63657 T 19930928 (199344) C12P013-06

US 5362637 A 19941108 (199444) 4p C12P013-06

EP 542487 A3 19940406 (199522) C12P013-06

EP 542487 B1 19980902 (199839) EN C12P013-06

R: DE FR GB IT

DE 69226844 E 19981008 (199846) C12P013-06

HU 216332 B 19990628 (199931) C12P013-06

KR 9616135 B1 19961204 (199931) C12P013-06

JP 3036930 B2 20000424 (200025) 5p C12P013-06

CA 2082347 C 20020528 (200249) EN C12P013-06

ADT EP 542487 A2 EP 1992-310184 19921106; JP 05130882 A JP 1991-294420 19911111; CA 2082347 A CA 1992-2082347 19921106; HU 63657 T HU 1992-3542 19921111; US 5362637 A US 1992-973452 19921109; EP 542487 A3 EP 1992-310184 19921106; EP 542487 B1 EP 1992-310184 19921106; DE 69226844 E DE 1992-626844 19921106; EP 1992-310184 19921106; HU 216332 B HU 1992-3542 19921111; KR 9616135 B1 KR 1992-21067 19921111; JP 3036930 B2 JP 1991-294420 19911111; CA 2082347 C CA 1992-2082347 19921106

FDT DE 69226844 E Based on EP 542487; HU 216332 B Previous Publ. HU 63657; JP 3036930 B2 Previous Publ. JP 05130882

PRAI JP 1991-294420 19911111

REP No-SR.Pub; 5.Jnl.Ref; EP 213536; EP 356739; FR 2491495; JP 02042988; JP 53069881

IC ICM C12P013-06

ICS C12N001-20; C12P001-04

ICI C12N001-20, C12R001:19; C12N001-20, C12R001:19; C12N001-20, C12R001:19; C12P013-06, C12P013:08; C12P013-06, C12R001:19

AB EP 542487 A UPAB: 19931113

(A) L-isoleucine (I) is produced by culturing in a medium a microorganism of the genus Escherichia having resistance to an isoleucine analogue and an ability to produce (I).

(B) Biologically pure cultures of E. coli H-8271 (FERM BP-3626), H-8272 (FERM BP-3627), H-8273 (FERM BP-3628), H-8285 (FERM BP-3629) and H-8362 (FERM BP-3630) are new.

USE - (I) plays a nutritiously important role for humans and animals and is used for medicaments such as aminoacid prepns. foods and animal feeds.

In an example, E. coli H-8285 was cultured at 30 deg.C. in a seed medium of 2% glucose, 1% peptone, 1% yeast extract, 0.25% NaCl, 200mg/l diamino pimelic acid for 16 hrs. at pH 7.4 with shaking. Then 0.5 ml. of the seed culture was inoculated into 20 ml. of fermentation medium pH 8.0 (6% glucose, 1-6% ammonium sulphate, 0.1% KH2PO4, 100mg/l. DL-methionine, 300mg/l diamino pimelic acid, 0.2% corn steep liquor, 4% magnesium phosphate, 1% CaCO3) and cultured with shaking at 30 deg.C. for 72 hrs. to give

12.5g/l of L-isoleucine and 0.2 g/l of L-threonine.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B10-B02J; D05-C01; D05-H04; E10-B02D6

L96 ANSWER 15 OF 31 WPIX (C) 2002 THOMSON DERWENT

AN 1993-086811 [11] WPIX

DNC C1993-038239

TI Riboflavin prodn. by fermentation, used in medicine and as food additive - using mutant strains of Bacillus subtilis having reduced de-phosphorylating activity for GMP 5'-guanylic acid precursor.

DC B02 D13 D16 E13 E23

IN NAKAMATU, T; USUI, N; YAMAMOTO, Y

PA (AJIN) AJINOMOTO KK; (AJIN) AJINOMOTO CO INC

CYC 5

PI EP 531708 A2 19930317 (199311)\* EN 5p C12P025-00

R: DE FR IT

JP 05064597 A 19930319 (199317) 5p C12P025-00

US 5334510 A 19940802 (199430) 4p C12P025-00

EP 531708 A3 19940406 (199522) C12P025-00

EP 531708 B1 19970402 (199718) EN 5p C12P025-00

R: DE FR IT

DE 69218700 E 19970507 (199724) C12P025-00

JP 2979767 B2 19991115 (199954) 5p C12P025-00

ADT EP 531708 A2 EP 1992-113274 19920804; JP 05064597 A JP 1991-227864

19910909; US 5334510 A US 1992-942191 19920909; EP 531708 A3 EP

1992-113274 19920804; EP 531708 B1 EP 1992-113274 19920804; DE 69218700 E

DE 1992-618700 19920804; EP 1992-113274 19920804; JP 2979767 B2 JP

1991-227864 19910909

FDT DE 69218700 E Based on EP 531708; JP 2979767 B2 Previous Publ. JP 05064597

PRAI JP 1991-227864 19910909

REP No-SR.Pub; BE 890917; FR 2204687; FR 2546907; US 4165250

IC ICM C12P025-00

ICS C12N001-20

ICI C12P025-00, C12R001:125; C12P025-00, C12R001:1

AB EP 531708 A UPAB: 19931122

Prodn. comprises (a) culturing, in a liq. fermentation medium, a mutant strain of the genus Bacillus, which has a decreased **phosphoric acid** liberating activity from 5'-guanylic acid (5'-GMP), and has riboflavin producing ability; (b) accumulating riboflavin in the medium and (c) recovering the riboflavin.

Also claimed are B. subtilis strains FERM BP-3855 and BP-3856.

USE/ADVANTAGE - Riboflavin is used in medicine, and as a food additive and colouring. The organisms used in the new process have improved riboflavin prodn. capability and at higher concn. compared to prior art microorganisms, providing an efficient, inexpensive, fermentation route to riboflavin.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: B03-C; B04-B02B1; B12-J01; D03-H01E; D03-H02E; D05-C10; D05-H01; E06-D17; E11-M

L96 ANSWER 16 OF 31 HCAPLUS COPYRIGHT 2002 ACS

AN 1989:619139 HCAPLUS

DN 111:219139

TI Anticalculus dentifrices containing blocked poly(amino acids) as inhibitors for mineral crystal growth on the tooth surface

IN Sikes, Steven; Wheeler, A. P.

PA University of South Alabama, USA  
 SO Eur. Pat. Appl., 26 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM A61K007-16  
 CC 62-7 (Essential Oils and Cosmetics)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 305282	A1	19890301	EP 1988-402138	19880823
	EP 305282	B1	19911106		
	R: BE, DE, FR, GB				
	US 4866161	A	19890912	US 1987-88248	19870824
	CA 1334283	A1	19950207	CA 1988-575406	19880823
	JP 01071808	A2	19890316	JP 1988-210403	19880824
PRAI	US 1987-88248		19870824		

AB Poly(amino acids) poly(X)n poly(Y)m [X = aspartic acid, **glutamic acid**, phosphoserine, phosphohomoserine, phosphotyrosine, phosphothreonine; Y = alanine, leucine, isoleucine, valine, glycine; n, m = 2-60; n + m = .gtoreq.5; poly(X)n may contain up to 10% of the Y residues; poly(Y)m may contain up to 10% of the X residues] and salts thereof are capable of inhibiting the deposition of minerals on the surface of a tooth. Such poly(amino acids) include, H2N(Asp)n(Ala)mOH, H2N(Ala)m(Asp)nOH, H2N(pSer)n(Ala)mOH, H2N(Ala)m(pSer)nOH, H2N(Glu)m(Ala)nOH, H2N(Ala)m(Asp)n(pSer)xOH, and H2N(Ala)m(Glu)n(pSer)xOH (n = 10-60, m = 2-10, x = 2-5). Specific compds. are H2N(Ala)5(Asp)18(pSer)2OH, H2N(Ala)8(Asp)4OH, and H2N(Ala)5(Asp)15OH. The peptides were made using an automated, solid-phase synthesis method. A mouthwash contained a poly(amino acid) as tartar barrier agent 0.5-3.0, EtOH 15.0, Pluronic F-108 (foaming agent) 2.0, glycerol (humectant) 10.0, sorbitol (humectant) 10.0, Na saccharin 0.2, water q.s., and flavor 0.2% by wt. The poly(amino acids) were shown to inhibit **CaCO3** and Ca **phosphate** deposition in soln.

ST dentifrice mineralization inhibitor polyamino acid; tooth **calculus** inhibition polyamino acid; peptide tartar inhibitor toothpaste

IT Peptides, biological studies

RL: BIOL (Biological study)  
 (alanine-contg., anticalculus dentifrices contg.)

IT Dentifrices

(anticalculus, contg. block poly(amino acids))

IT Peptides, biological studies

RL: BIOL (Biological study)  
 (aspartic acid-contg., anticalculus dentifrices contg.)

IT Tooth

(disease, **calculus**, prevention of, block poly(amino acids) for)

IT Peptides, biological studies

RL: BIOL (Biological study)  
 (**glutamic acid**-contg., anticalculus dentifrices contg.)

IT Peptides, biological studies

RL: BIOL (Biological study)  
 (glycine-contg., anticalculus dentifrices contg.)

IT Peptides, biological studies

RL: BIOL (Biological study)  
 (isoleucine-contg., anticalculus dentifrices contg.)

IT Peptides, biological studies

RL: BIOL (Biological study)  
 (leucine-contg., anticalculus dentifrices contg.)

IT Peptides, biological studies  
 RL: BIOL (Biological study)  
 (phosphohomoserine-contg., anticalculus dentifrices contg.)

IT Peptides, biological studies  
 RL: BIOL (Biological study)  
 (phosphoserine-contg., anticalculus dentifrices contg.)

IT Peptides, biological studies  
 RL: BIOL (Biological study)  
 (phosphothreonine-contg., anticalculus dentifrices contg.)

IT Peptides, biological studies  
 RL: BIOL (Biological study)  
 (phosphotyrosine-contg., anticalculus dentifrices contg.)

IT - Polyamides, biological studies  
 RL: BIOL (Biological study)  
 (poly(amino acids), block, anticalculus dentifrices contg., as mineralization inhibitors)

IT Peptides, biological studies  
 RL: BIOL (Biological study)  
 (valine-contg., anticalculus dentifrices contg.)

IT 123690-47-1 123690-48-2 123690-49-3 123757-44-8  
 RL: BIOL (Biological study)  
 (anticalculus dentifrices contg.)

IT 123690-43-7 123690-44-8 123690-45-9 123690-46-0  
 RL: BIOL (Biological study)  
 (calcium carbonate crystn. inhibition by)

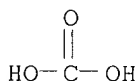
IT 471-34-1, Calcium carbonate, properties  
 RL: PRP (Properties)  
 (crystn. of, inhibition of, blocked poly(amino acids) for)

IT 10103-46-5, Calcium phosphate  
 RL: BIOL (Biological study)  
 (mineralization of, inhibition of, blocked poly(amino acids) for)

IT 471-34-1, Calcium carbonate, properties  
 RL: PRP (Properties)  
 (crystn. of, inhibition of, blocked poly(amino acids) for)

RN 471-34-1 HCAPLUS

CN Carbonic acid calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



Ca

L96 ANSWER 17 OF 31 HCAPLUS COPYRIGHT 2002 ACS

AN 1987:532990 HCAPLUS

DN 107:132990

TI Influence of **feed** ion content on buffering capacity of ruminant **feedstuffs** in vitro

AU Jasaitis, D. K.; Wohlt, J. E.; Evans, J. L.

CS Cook Coll., Rutgers, State Univ., New Brunswick, NJ, 08903, USA

SO J. Dairy Sci. (1987), 70(7), 1391-403  
 CODEN: JDSCAE; ISSN: 0022-0302

DT Journal

LA English

CC 17-12 (Food and **Feed** Chemistry)



AB The in vitro buffering capacity of 52 **feeds** was measured to det. the buffering capacity range within and among **feed** types. **Feeds** were analyzed for dry matter, total ash, minerals (Ca, Mg, K, Na, Cl, N, P, Si, S), pH, titratable acidity and alky., acid-buffering capacity, and base-buffering capacity (milliequivalents of acid or base required to bring 0.5 g dry matter suspended in 50 mL distd. deionized water to pH 4 or 9, resp., divided by total pH change). Buffering capacity was lowest for energy **feeds**, intermediate for low protein **feeds** (15 to 35% crude protein) and grass forages, and highest for high protein **feeds** (<35% crude protein) and legume forages. The concept of diet formulation for a predetd. buffering capacity was tested. Two isonitrogenous and isocaloric diets substantially different from each other in buffering capacity were formulated using ingredients from the pool of 52 **feeds**. The measured acid-buffering capacity of these diets was similar to their predicted values. Acid buffering capacity was correlated with total cations and total ash. However, simple linear regression was not sufficient to predict accurately acid-buffering capacity from total ash values. Further studies are needed to provide a better est. of **feed**-buffering capacity.

ST buffer capacity **feed** cation mineral element

IT **Feed**

(buffering capacity of, mineral elements effect on)

IT Soybean

(hulls, mineral elements of, **feed** buffer capacity in relation to)

IT Barley

Bone meal

Bran

Bromus

**Cottonseed** meal

Grass

Legume

Oat

Orchard grass

Rye

Sorghum

Soybean meal

Sunflower meal

Timothy

Vinasse and Distillery slops

Wheat

**Whey**

(mineral elements of, **feed** buffer capacity in relation to)

IT Anions

Cations

Mineral elements

RL: BIOL (Biological study)

(of **feed**, buffering capacity in relation to)

IT Buffer action

(of mineral elements in **feed**)

IT Citrus

(pulp, mineral elements of, **feed** buffer capacity in relation to)

IT Hay

(alfalfa, mineral elements of, **feed** buffer capacity in relation to)

IT Waste solids

(brewing, spent grains, mineral elements of, **feed** buffer capacity in relation to)

IT Plant  
 (forage, mineral elements of, **feed** buffer capacity in relation to)

IT Alfalfa  
 (hay, mineral elements of, **feed** buffer capacity in relation to)

IT Corn  
 (hominy, mineral elements of, **feed** buffer capacity in relation to)

IT Alfalfa  
 Corn  
 Fish  
 Flaxseed  
 Meat  
 (meal, mineral elements of, **feed** buffer capacity in relation to)

IT Beet  
 (pulp, mineral elements of, **feed** buffer capacity in relation to)

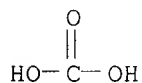
IT 57-13-6, Urea, biological studies 144-55-8, Sodium bicarbonate, biological studies 471-34-1, biological studies 7558-79-4, Disodium **phosphate** 7558-80-7, Monosodium **phosphate** 7757-93-9, Dicalcium **phosphate** 7758-87-4, Tricalcium **phosphate** 13397-26-7, Calcite, biological studies 14791-73-2, Aragonite  
 RL: BIOL (Biological study)  
 (**feed** additive, **feed** buffering capacity in relation to)

IT 7439-95-4, Magnesium, biological studies 7440-09-7, Potassium, biological studies 7440-21-3, Silicon, biological studies 7440-23-5, Sodium, biological studies 7440-70-2, Calcium, biological studies 7704-34-9, Sulfur, biological studies 7723-14-0, Phosphorus, biological studies 7727-37-9, Nitrogen, biological studies 16887-00-6, Chloride, biological studies  
 RL: BIOL (Biological study)  
 (of **feed**, buffering capacity in relation to)

IT 471-34-1, biological studies  
 RL: BIOL (Biological study)  
 (**feed** additive, **feed** buffering capacity in relation to)

RN 471-34-1 HCAPLUS

CN Carbonic acid calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



Ca

L96 ANSWER 18 OF 31 HCAPLUS COPYRIGHT 2002 ACS  
 AN 1986:513969 HCAPLUS  
 DN 105:113969  
 TI High montmorillonite content stock **feed** supplement  
 IN Kingston, David John; Whatmore, William Leigh  
 PA Australia

KATHLEEN FULLER EIC 1700/LAW LIBRARY 308-4290

SO Pat. Specif. (Aust.), 28 pp.  
 CODEN: ALXXAP  
 DT Patent  
 LA English  
 IC A23K011-75  
 CC 17-12 (Food and **Feed** Chemistry)  
 Section cross-reference(s): 18, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	AU 548773	B1	19860102	AU 1984-36231	19841203

AB A **feed** supplement (granules or pellets) for carbohydrate overload prevention contains montmorillonite clays at 20-99.9% (hectorite, saponite, bentonite, nontronite, zeolite, or combinations) and 0.1-80% of additives (binders, minerals, vitamins, enzymes, drugs, etc.). Thus, a supplement for horses contained Na bentonite 30, hectorite 35, saponite 28, **CaCO3** 5.0, folic acid 0.07, papain 0.5, maltose 0.25, amylase 0.25, cellulose 0.25, protease 0.04, and anise **seed** flavor 0.64%. This compn. is offered at 75 g/horse/day.

ST montmorillonite supplement **feed** livestock

IT Proteins

RL: BIOL (Biological study)

(alfalfa conc., **feed** supplement contg. montmorillonite and)

IT Binding materials

Enzymes

Limestone, biological studies

Mineral elements

**Phosphates**, biological studies

Vitamins

RL: BIOL (Biological study)

(**feed** supplement contg. montmorillonite and)

IT Cattle

Dog

Horse

Ruminant

Sheep

Swine

(**feed** supplement for, montmorillonite-contg.)

IT Bentonite, biological studies

Smectite-group minerals

Zeolites, biological studies

RL: BIOL (Biological study)

(**feed** supplements contg.)

IT **Molasses**

(livestock supplement contg. montmorillonite and)

IT **Feed**

(montmorillonite-contg. supplements for)

IT Wool

(prodn. of, montmorillonite-contg. **feed** supplement for enhancement of)

IT Anise

(**seed**, flavor, **feed** supplement contg. montmorillonite and)

IT Alfalfa

(hay, binder, for montmorillonite-contg. **feed** supplements)

IT Bentonite, biological studies

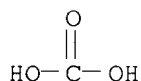
RL: BIOL (Biological study)

(sodian, **feed** supplement contg.)

IT Pharmaceuticals

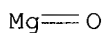
(veterinary, **feed** supplement contg. montmorillonite and)

IT 56-87-1, biological studies 57-13-6, biological studies 59-30-3,  
 biological studies 63-68-3, biological studies 471-34-1,  
 biological studies 546-93-0 1309-48-4, biological studies  
 7487-88-9, biological studies 7647-14-5, biological studies  
 7723-14-0, biological studies 7783-20-2, biological studies 9000-30-0  
 9000-92-4 9001-42-7 9001-73-4 9001-92-7 9012-54-8  
 RL: BIOL (Biological study)  
 (feed supplement contg. montmorillonite and)  
 IT 1318-93-0, biological studies 1319-41-1 12173-47-6 12174-06-0  
 15501-74-3  
 RL: BIOL (Biological study)  
 (feed supplements contg.)  
 IT 471-34-1, biological studies 1309-48-4, biological  
 studies 7487-88-9, biological studies  
 RL: BIOL (Biological study)  
 (feed supplement contg. montmorillonite and)  
 RN 471-34-1 HCAPLUS  
 CN Carbonic acid calcium salt (1:1) (8CI, 9CI) (CA INDEX NAME)

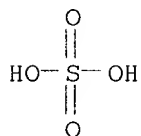


Ca

RN 1309-48-4 HCAPLUS  
 CN Magnesium oxide (MgO) (9CI) (CA INDEX NAME)



RN 7487-88-9 HCAPLUS  
 CN Sulfuric acid magnesium salt (1:1) (8CI, 9CI) (CA INDEX NAME)



Mg

L96 ANSWER 19 OF 31 HCAPLUS COPYRIGHT 2002 ACS  
 AN 1984:529450 HCAPLUS  
 DN 101:129450  
 TI Animal feed block  
 IN Graham, Clifford Arthur; Linehan, Kevin Laurence  
 PA ICI Australia Ltd. , Australia  
 SO Brit. UK Pat. Appl., 11 pp.  
 CODEN: BAXXDU

DT Patent  
 LA English  
 IC A23K001-02; A23K001-175  
 CC 18-7 (Animal Nutrition)  
 Section cross-reference(s): 17

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2131273	A1	19840620	GB 1983-32609	19831207
	GB 2131273	B2	19860618		
	AU 8321997	A1	19840614	AU 1983-21997	19821207
	AU 563082	B2	19870625		
	CA 1206368	A1	19860624	CA 1983-442743	19831207
PRAI	AU 1982-7161		19821207		
	AU 1982-7185		19821208		

AB An animal **feed** block is prepd. by mixing **molasses**, **MgO**, and legume **seed**. Thus, 2300 parts **molasses** was mixed with 3200 parts lupine **seed**, heated to 60.degree., and blended with 750 parts **MgO**, 400 parts dicalcium **phosphate**, and 400 parts **cottonseed** meal. Agitation was continued and 300 parts NaCl, 200 parts anhyd. Na<sub>2</sub>SO<sub>4</sub>, and 130 parts trace elements were added. The viscosity was lowered by adding 700 parts urea [57-13-6], 400 parts water, and 25 parts surfactant agent. Then 12 parts of an alc.-ethylene oxide condensate and an addnl. 1195 parts **molasses** were added and the mixt. was held at 70.degree. until it solidified.

ST **molasses** animal **feed** block; **magnesium oxide** animal **feed** block; lupine animal **feed** block

IT **Feed**  
 (block, prepn. of, from **molasses** and **magnesium oxide** and lupine **seed**)

IT Sheep  
 (feeding expt. on, with **molasses feed** block)

IT **Molasses**  
 (in animal **feed** block prepn., with **magnesium oxide** and legume **seed**)

IT **Cottonseed** meal  
 Trace elements  
 RL: PREP (Preparation)  
 (in animal **feed** block prepn., with **molasses** and **magnesium oxide** and legume **seed**)

IT Legume  
 Lupine  
 (seed, in animal **feed** block prepn. with **molasses** and **magnesium oxide**)

IT 1309-48-4, biological studies  
 RL: BIOL (Biological study)  
 (in animal **feed** block prepn., with **molasses** and legume **seed**)

IT 57-13-6, biological studies 107-92-6, biological studies  
 RL: BIOL (Biological study)  
 (in animal **feed** block prepn., with **molasses** and **magnesium oxide** and legume **seed**)

IT 75-21-8D, alc. condensate 7647-14-5, biological studies 7757-82-6, biological studies 7757-93-9  
 RL: BIOL (Biological study)  
 (in animal **feed** block prepn., with **molasses** and **magnesium oxide** and legumeseed)

IT 1309-48-4, biological studies  
 RL: BIOL (Biological study)  
 (in animal feed block prepn., with molasses and  
 legume seed)  
 RN 1309-48-4 HCAPLUS  
 CN Magnesium oxide (MgO) (9CI) (CA INDEX NAME)

Mg=O

L96 ANSWER 20 OF 31 HCAPLUS COPYRIGHT 2002 ACS  
 AN 1985:4710 HCAPLUS  
 DN 102:4710  
 TI Studies on the development of food resources from waste seeds.  
 V. Chemical composition of watermelon seed  
 AU Yoon, Hyung Sik; Kwon, Joong Ho; Hwang, Joo Ho; Bae, Man Jong  
 CS Dep. Food Sci. Technol., Kyung Pook Natl. Univ., S. Korea  
 SO Han'guk Yongyang Siklyong Hakhoechi (1983), 12(3), 207-11  
 CODEN: HYSHDL; ISSN: 0253-3154  
 DT Journal  
 LA Korean  
 CC 17-13 (Food and Feed Chemistry)  
 AB The use of watermelon seeds as a source of food fats and protein  
 was studied. Watermelon seeds contained 40% crude fat and  
 28.36% crude protein. The lipid fraction obtained by silicic acid column  
 chromatog. was composed of .apprx.97.35% neutral lipid, and the main  
 components of neutral lipid by TLC were triglycerides (50.40%),  
 diglycerides (21.84%), and sterols (11.48%). The predominant fatty acids  
 of total and major lipid classes were linoleic acid (55.30-67.85%),  
 palmitic acid (12.07-28.12%), and oleic acid (9.06-16.40%), whereas  
 stearic acid and linolenic acid were detected at small amts. The  
 salt-sol. protein of watermelon seeds was highly dispersible in  
 0.02M Na phosphate buffer contg. .apprx.0.7M MgSO4,  
 and the extractability of seed protein was .apprx.27%.  
 Glutamic acid and arginine were the major amino acids,  
 and essential amino acids, such as lysine, threonine, valine, methionine,  
 isoleucine, leucine, and phenylalanine, were also detected.  
 Electrophoretic anal. showed 6 bands in watermelon seed protein,  
 and the collection rate of the main protein fraction purified by Sephadex  
 G-100 and G-200 was 52.4%. The amino acids of the main fraction protein  
 were also mainly composed of glutamic acid and  
 arginine. The mol. wt. for the main protein of the water-melon  
 seed was estd. to be 120,000.  
 ST watermelon seed fat protein food; fatty acid watermelon  
 seed food; amino acid watermelon seed food  
 IT Seed  
 (lipid and protein of, of watermelon, as food)  
 IT Amino acids, biological studies  
 Fatty acids, biological studies  
 Lipids, biological studies  
 Proteins  
 RL: BIOL (Biological study)  
 (of watermelon seed, as food)  
 IT Watermelon  
 (seed of, lipids and proteins of, for food)  
 IT Food  
 (watermelon seed lipids and proteins as)  
 IT Amino acids, biological studies

- RL: BIOL (Biological study)  
(essential, of watermelon **seed**, as food)
- IT Steroids, biological studies  
RL: BIOL (Biological study)  
(hydroxy, of watermelon **seed**, as food)
- L96 ANSWER 21 OF 31 HCAPLUS COPYRIGHT 2002 ACS  
AN 1984:155415 HCAPLUS  
DN 100:155415  
TI Studies on the development of food resources from waste **seeds**.  
Part III. Chemical composition of pumpkin and melon **seeds**  
AU Yoon, Hyung Sik; Oh, Man Jin; Choi, Cheong  
CS Dep. Food Sci. Technol., Kyungpook Natl. Univ., Taegu, S. Korea  
SO Han'guk Nonghwa Hakhoechi (1983), 26(3), 163-8  
CODEN: JKACA7; ISSN: 0368-2897  
DT Journal  
LA Korean  
CC 17-10 (Food and **Feed Chemistry**)  
AB The pumpkin and melon **seeds** contained .apprx.41% crude fat and  
.apprx.31% crude protein. The lipid fractions obtained by silicic acid  
column chromatog. were .apprx.96% neutral lipid, and among the neutral  
lipid sepd. by thin layer chromatog., triglyceride and free fatty acid  
were the major components in both **seeds**. The predominant fatty  
acids of the pumpkin and melon **seeds** were linoleic (51.8-70.5%),  
palmitic (11.0-27.8%), and oleic (7.8-16.4%) acids. The salt sol.  
proteins of the cucurbit **seeds** were highly dispersible in 0.02M  
**phosphate** buffer contg. about 1.0M **MgSO4**, and the  
extractabilities of the pumpkin and melon **seed** proteins were 40%  
and 32%, resp. **Glutamic acid**, arginine and tyrosine  
were the major amino acids, and the essential amino acids such as lysine,  
threonine, valine, methionine, isoleucine, leucine and phenylalanine were  
detected in both **seeds**. The electrophoretic anal. showed 6  
bands in pumpkin **seed** protein and 8 bands in melon **seed**  
, and the collection rate of the main protein fractions purified by  
Sephadex G-100 and G-200 was 58.3% in pumpkin **seed** and 55.0% in  
melon **seed**. Arginine and **glutamic acid** were  
the major amino acids in the main **seed** proteins and the mol. wt.  
for the main proteins of the pumpkin and melon **seeds** were 48,000  
and 78,000, resp.
- ST pumpkin melon **seed** compn food; protein pumpkin melon  
**seed**; amino acid pumpkin melon **seed**; fatty acid pumpkin  
melon **seed**
- IT Amino acids, biological studies  
Fatty acids, biological studies  
Proteins  
RL: BIOL (Biological study)  
(of melon and pumpkin **seeds**, food applications in relation  
to)
- IT Melon (plant)  
(**seeds**, compn. of, food applications in relation to)
- IT Cucurbita  
(pumpkin, **seeds**, compn. of, food applications in relation to)
- L96 ANSWER 22 OF 31 HCAPLUS COPYRIGHT 2002 ACS  
AN 1983:452122 HCAPLUS  
DN 99:52122  
TI Studies on the development of food resources from waste **seeds**.  
II. Chemical composition of apple **seed**  
AU Yoon, Hyung Sik; Choi, Cheong; Oh, Man Jin  
CS Dep. Food Sci. Technol., Kyung-Pook Natl. Univ., Daegu, S. Korea

- SO Hanguk Sikp'um Kwahakhoe Chi (1983), 15(2), 128-32  
CODEN: HSKCAN; ISSN: 0367-6293
- DT Journal
- LA Korean
- CC 17-10 (Food and **Feed** Chemistry)  
Section cross-reference(s): 11
- AB Apple **seeds** contained 25.96% crude fat and 37.62% crude protein. The lipid fractions obtained by silicic column chromatog. were mainly composed of .apprx.93.52% neutral lipid, with compd. lipids at the 6.48% level. Among the neutral lipids sepd. by thin layer chromatog., triglycerides was 92.17%, sterol esters, sterols, diglycerides, and free fatty acids were 3.53, 2.25, 1.44, and 0.56%, resp. The predominant fatty acids of total and neutral lipids were linoleic acid (59.79-69.37%) and oleic acid (20.04-29.82%), but that of glycolipids and phospholipids was linoleic acid (29.20-36.04%). The major fatty acids of triglycerides sepd. from neutral lipids were oleic acid (44.31%), linoleic acid (36.66%), and palmitic acid (12.48%). The salt-sol. protein of apple **seed** was highly dispersible in 0.02M Na **phosphate** buffer contg. .apprx.1.0M **MgSO4**, and the extractability of **seed** protein was 37%. **Glutamic acid** was the major amino acid in salt-sol. protein, followed by arginine and aspartic acid. Electrophoretic anal. showed 3 bands in apple **seed** protein, and the collection rate of the main protein fraction purified by Sephadex G-100 and G-200 was 76.6%. **Glutamic acid**, aspartic acid, and arginine were the major amino acids of the main apple **seed** protein. The mol. wt. for the main protein of the apple **seed** was estd. to be 45,000.
- ST apple **seed** lipid protein; glyceride apple **seed**; fatty acid apple **seed**
- IT Fatty acids, biological studies  
Glycerides, biological studies  
Glycolipids  
Lipids, biological studies  
Phospholipids  
Proteins  
RL: BIOL (Biological study)  
(of apple **seeds**, food applications in relation to)
- IT Apple  
(**seed**, lipids and proteins of, food applications in relation to)
- IT Steroids, biological studies  
RL: BIOL (Biological study)  
(hydroxy, of apple **seeds**, food applications in relation to)
- L96 ANSWER 23 OF 31 HCAPLUS COPYRIGHT 2002 ACS
- AN 1983:486869 HCAPLUS
- DN 99:86869
- TI Studies on the development of food resources from waste **seeds**.  
IV. Chemical composition of red pepper **seed**
- AU Yoon, Hyung Sik; Kwon, Joong Ho; Bae, Man Jong; Hwang, Joo Ho
- CS Dep. Food Sci. Technol., Kyungpook Natl. Univ., Taegu, S. Korea
- SO Han'guk Yongyang Siklyong Hakhoechi (1983), 12(1), 46-50  
CODEN: HYSHDL; ISSN: 0253-3154
- DT Journal
- LA Korean
- CC 17-10 (Food and **Feed** Chemistry)
- AB Red pepper **seeds** contained 27.6% crude fat and 22.2% crude protein. The lipid fractions obtained by silicic acid column chromatog. contained 95.4% neutral lipid and compd. lipid 4.6%. Among the neutral lipid sepd. by thin layer chromatog., triglyceride was 85.6%, sterol ester



4.9%, free fatty acids 3.4%, diglyceride 2.5%, sterol 2.2% and monoglyceride 1.1%. The predominant fatty acids of red pepper **seed** oil were linoleic acid (57.1-75.4%), palmitic acid (13.9-21.3%) and oleic acid (8.0-15.1%). The glycolipids contained 1.7% of linolenic acid and small amts. of myristic acid and arachidic acid. The salt sol. protein of red pepper **seed** was highly dispersible in 0.02M Na **phosphate** buffer contg. 1.0M **MgSO4**, and the extractability of **seed** protein was about 25.0%.

**Glutamic acid** and arginine were major amino acids of red pepper **seed** protein. Electrophoretic anal. showed 6 bands and the collection rate of the main protein fraction purified by Sephadex G-100 and G-200 was >62.2%. **Glutamic acid** (19.9%) was the major amino acid of the main protein, followed by glycine and alanine. The mol. wt. of the main protein was 93,000.

ST red pepper **seed** compn; protein red pepper **seed**; lipid red pepper **seed**; fatty acid red pepper **seed**

IT Fatty acids, biological studies

Glycerides, biological studies

Glycolipids

Lipids, biological studies

Proteins

RL: BIOL (Biological study)

(of red pepper **seed**, food value in relation to)

IT Steroids, biological studies

RL: BIOL (Biological study)

(hydroxy, of red pepper **seed**, food value in relation to)

IT Capsicum annuum annuum

(longum group, **seeds** of, compn. of, food value in relation to)

L96 ANSWER 24 OF 31 HCAPLUS COPYRIGHT 2002 ACS

AN 1982:614489 HCAPLUS

DN 97:214489

TI Studies on the development of food resources from waste **seeds**.

I. Chemical composition of grape **seed**

AU Yoon, Hyung Sik; Kwon, Joong Ho; Choi, Jae Chun; Hwang, Joo Ho; Shin, Dae Hyn

CS Coll. Agric., Kyungpook Natl. Univ., Taegu, S. Korea

SO Hanguk Sikip'um Kwahakhoe Chi (1982), 14(3), 250-6

CODEN: HSKCAN; ISSN: 0367-6293

DT Journal

LA Korean

CC 17-9 (Food and **Feed** Chemistry)

AB Grape **seed** contained 25.1% crude fat and 12.0% crude protein.

The lipid fractions obtained by silicic acid column chromatog. were 95.5% neutral lipid, whereas complex lipid was only 4.5%. Triglyceride was 91.89%, and sterol ester, sterol, diglyceride and free fatty acid were 3.24%, 2.87%, 1.20% and 0.80% of neutral lipids, resp. The predominant fatty acids of total and neutral lipids were linoleic acid (69.72-71.72%) and oleic acid (18.09-19.46%), but those of glycolipid and phospholipid were linoleic acid (31.49-38.18%), oleic acid (20.20-35.27%) and palmitic acid (26.80-39.98%). The major fatty acids of triglyceride sepd. from neutral lipid were oleic acid (43.08%), linoleic acid (38.42%) and palmitic acid (11.60%). The salt sol. protein of grape **seed** was highly dispersible in 0.02M Na **phosphate** buffer contg. .apprx.1.0M **MgSO4**, and the extractability of **seed** protein was 31%. **Glutamic acid** was the major amino acid in salt sol. protein, followed by arginine and aspartic acid. Electrophoretic anal. showed 3 bands in grape **seed** protein, and the collection rate of the main protein fraction purified by Sephadex

G-100 and G-200 was 82%. **Glutamic acid**, aspartic acid and arginine were the major amino acids of the main grape **seed** protein. The mol. wt. for the main protein of the grape **seed** was estd. to be 81,000.

ST grape **seed** lipid protein

IT Amino acids, biological studies

Fatty acids, biological studies

Glycerides, biological studies

Lipids, biological studies

Oils

Proteins

RL: BOC (Biological occurrence); BIOL (Biological study); OCCU

(Occurrence).

(of grape **seed**)

IT Grape

(**seeds** of, lipids and proteins of)

IT Steroids, biological studies

RL: BOC (Biological occurrence); BIOL (Biological study); OCCU

(Occurrence)

(hydroxy, of grape **seed**)

L96 ANSWER 25 OF 31 WPIX (C) 2002 THOMSON DERWENT

AN 1981-40057D [22] WPIX

TI Thixotropic animal **feed** supplement carrier - for water insoluble **feed** nutrient powder consists of sugar soln. gelled with ammonium **phosphate** or sulphate.

DC C03 D13

PA (PACI-N) PACIFIC KENYON CORP

CYC 1

PI US 4267197 A 19810512 (198122)\*

PRAI US 1978-917472 19780621; US 1979-93903 19791113

IC A23K001-22

AB US 4267197 A UPAB: 19930915

The **feed** supplement consists of a 12% by wt. sugar soln. gelled with ammonium orthophosphate or sulphate at pH 6.5 to 7.5 and water insoluble powdered **feed** nutrient with the viscosity of the final product being adjusted to 4,000 to 10,000 cps by the addition of water. The water insoluble nutrient may be 2 to 20% by wt. of the composition and consists of one or more of **calcium carbonate**, **calcium sulphate**, and calcium **phosphate** of 100 to 325 mesh particle size. An animal growth promoter such as 0.02 to 0.15% wt. monensin.

Suitable sugars include sucrose, glucose, lactose, maltose, fructose, **molasses**, dried skimmed milk and lignin sulphonates. Other ingredients may be included such as dried blood, meat meal, **cottonseed** meal, soy meal, dried alfalfa, manure, fish meal, powdered egg and cell cream.

The composition may be stored for long periods without deterioration.

FS CPI

FA AB

MC CPI: C02-N; C04-B04A; C04-D01; C05-A01B; C05-B02A2; C05-C01; C10-A13C; C12-L09; D03-G01

L96 ANSWER 26 OF 31 WPIX (C) 2002 THOMSON DERWENT

AN 1980-74015C [42] WPIX

TI Antibiotic A 40 A prodn. - by culturing Streptomyces Lavendulae aerobically on medium contg. carbohydrate source.

DC B03 C02 D13 D16

PA (KITA) KITASATO RES INST; (MERI) MERCK & CO INC

CYC 2

PI JP 55076874 A 19800610 (198042)\*  
 US 4264607 A 19810428 (198120)  
 JP 62021790 B 19870514 (198723)  
 PRAI US 1978-955553 19781027; US 1979-74202 19790913  
 IC A23K001-17; A61K001-17; A61K031-44; C07D405-12; C12P017-16; C12R001-56  
 AB JP 55076874 A UPAB: 19930902  
 Prodn. of new antibiotic material (A 40 A) comprises aerobically culturing *Streptomyces lavendulae* (ATCC 31312) at a temp. 24-32 degrees C in a culture medium having pH 6.0-8.0 which contains assimilable carbohydrate source (e.g. dextrose, glucose, arabinose, maltose, xylose or mannitol), N source (e.g. yeast extract, hydrolysis prod. of yeast extract, enzyme itself, soyabean powders, **cotton seed powders**, hydrolysis prod. of casein or **corn steep liquor**) and source of inorganic salt (e.g. NaCl, **CaCO3**, **CaSO4** .7H2O, KHSO4, K dihydrogen **phosphate** or disodium hydrogen **phosphate**).

Liquor produced is filtered and extracted with an aq. immiscible polar solvent (e.g. (m)ethyl formate, (m)ethyl acetate, n-butyl-acetate, isobutyl-acetate, ethyl-propionate, MFK, cyclohexanone, chloroform, methylene chloride, CCl4, ethylene dichloride, tetrachloro-ethylene or ethylene dichloride), whereby antibiotic material (A 40 A) having structural formula (I) is obtd. where the pyran in the formula has a steric configuration in its asymmetric centre.

(I) has a microbicidal effect on Gram positive bacteria and it is used as an additive to cattle **feed**.

FS CPI  
 FA AB  
 MC CPI: B02-Z; B12-L09; C02-Z; C12-L09; D03-G01; D05-C02

L96 ANSWER 27 OF 31 HCAPLUS COPYRIGHT 2002 ACS

AN 1980:213744 HCAPLUS  
 DN 92:213744  
 TI Animal **feed** blocks  
 IN Linehan, Kevin Laurence  
 PA ICI Australia Ltd., Australia  
 SO S. African, 38 pp.  
 CODEN: SFXXAB

DT Patent  
 LA English  
 IC A23J; A23K  
 CC 17-5 (Foods)  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	ZA 7805845	A	19791031	ZA 1978-5845	19781017
	US 4234608	A	19801118	US 1978-951954	19781016
	CA 1109793	A1	19810929	CA 1978-315615	19781031
PRAI	AU 1977-2259		19771101		

AB **Feed** blocks contg. **molasses**, nutrients, and(or) medications are hardened with **MgO** and CaHPO4. The general process involves heating a H2O-bearing medium to 45-80.degree. while agitating with a cavitation mixer or ribbon blender, adding **MgO** and CaHPO4 and mixing until uniform at <90.degree., blending in medications or nutrients, and transferring to molds and placing in an air circulating oven to keep the blocks at 55-90.degree. until rigid. The molds are cooled to ambient temp. and the blocks are released. Thus, a high-Mg block was prepd. from **molasses** 54, active **MgO** 11, CaHPO4 10, Fifield magnesia flour 12.5, salt 9, H2O 3, and trace elements 0.5%. The mixing temp. was 65.degree., and the oven time was .apprx.2 h. Addnl. formulations are given for high-Mg, high-

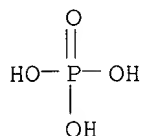
phosphate, high-protein, and high-salt blocks.  
 ST feed block magnesia; calcium phosphate feed  
 block  
 IT Feed  
 (block, hardening of, with dicalcium phosphate and  
 magnesium oxide)  
 IT Cottonseed meal  
 Peanut meal  
 Soybean meal  
 Wheat  
 Whey  
 Tallow  
 Trace elements  
 Vitamins  
 RL: BIOL (Biological study)  
 (of feed block hardened with dicalcium phosphate  
 and magnesium oxide)  
 IT Meat  
 Millet  
 Rice  
 (meal, of feed block hardened with dicalcium  
 phosphate and magnesium oxide)  
 IT 1309-48-4, biological studies  
 RL: BIOL (Biological study)  
 (feed block hardening with dicalcium phosphate and)  
 IT 7757-93-9  
 RL: BIOL (Biological study)  
 (feed block hardening with magnesium oxide  
 and)  
 IT 50-70-4, biological studies 50-99-7, biological studies 57-13-6,  
 biological studies 57-48-7, biological studies 57-50-1, biological  
 studies 64-19-7, biological studies 108-19-0 546-93-0  
 1305-62-0, biological studies 4401-74-5 6104-30-9 7647-14-5,  
 biological studies 7722-76-1 7757-82-6, biological studies  
 7757-93-9 7758-87-4 7786-30-3, biological studies 13547-17-6  
 19082-42-9 23296-15-3 28100-23-4  
 RL: BIOL (Biological study)  
 (of feed block hardened with dicalcium phosphate  
 and magnesium oxide)  
 IT 1309-48-4, biological studies  
 RL: BIOL (Biological study)  
 (feed block hardening with dicalcium phosphate and)  
 RN 1309-48-4 HCAPLUS  
 CN Magnesium oxide (MgO) (9CI) (CA INDEX NAME)

Mg=O

IT 1305-62-0, biological studies 7722-76-1  
 7786-30-3, biological studies 23296-15-3  
 RL: BIOL (Biological study)  
 (of feed block hardened with dicalcium phosphate  
 and magnesium oxide)  
 RN 1305-62-0 HCAPLUS  
 CN Calcium hydroxide (Ca(OH)2) (9CI) (CA INDEX NAME)

HO-Ca-OH

RN 7722-76-1 HCAPLUS  
CN Phosphoric acid, monoammonium salt (8CI, 9CI) (CA INDEX NAME)



NH<sub>3</sub>

RN 7786-30-3 HCAPLUS  
CN Magnesium chloride (MgCl<sub>2</sub>) (9CI) (CA INDEX NAME)

Cl-Mg-Cl

RN 23296-15-3 HCAPLUS

L96 ANSWER 28 OF 31 CABA COPYRIGHT 2002 CABI

AN 80:78130 CABA

DN 791487476

TI Role of balanced **feeds** in rearing of carp in warm water

Rol' sbalansirovannosti korma pri vyrashchivanii karpa na teplykh vodakh

AU Ostroumova, I. N.

SO Rybnoe Khozyaistvo, Moscow, (1978) No. 12, pp. 24-26.

DT Journal

LA Russian

AB Five diets are described for rearing carp: diet 1-75 consisting of fish meal 18, meat-and-bone meal 8, fodder yeast 20, sunflower phosphatides 3, sunflower oilmeal 12, soya bean oilmeal 7, rolled wheat 10, rolled barley 10, rolled oats 8, **molasses** 2, inorganic **phosphate** 1, **CaCO<sub>3</sub>** 1% and vitamins; diet 16-76, the same as diet 1-75 except that it lacked sunflower phosphatides; diet 12-75 (for young carp) containing fish meal 50, meat-and-bone meal 11, fodder yeast 10, sunflower phosphatides 3, sunflower oilmeal 3, rolled wheat 20 and **molasses** 3% plus vitamins; diet Vr. 112-Tul. 3, with sunflower oilmeal 3, **cottonseed** oilmeal 27, sunflower [press] cake 9, wheat bran 20, rolled barley 10, rolled oats 10, rolled peas 20, **CaCO<sub>3</sub>** 1%; diet K110-nov, with fodder yeast 2, soya bean oilmeal 7, sunflower cake 26, wheat bran 19, rolled wheat 7.9, rolled barley 10, rolled oats 6.6, rolled peas 20, **CaCO<sub>3</sub>** 0.5 and a premix P-III [not described] 1.0%. Young and 1-year-old carp were kept in ponds at 500 and 210/m<sup>2</sup>, respectively. Average water temperature was 26 deg to 30 deg C in June, 29 deg to 30 deg in July, 28 deg to 33 deg in August, 28 deg to 19 deg in September and 19 deg to 18 deg in October. Water oxygen concentration normally was 5 to 7 mg/litre. The protein in diet Vr. 112-Tul. 3 was low in lysine, methionine, tryptophan and arginine. For the yearlings fed on diets 1-75 stored for 1 to 4 months, 16-76 stored for 1 to 4 weeks, 1 to 75 stored for 8 to 12 weeks; 16-76 stored for 8 to 12 weeks and Vr.112-Tul. 3 stored for 1 to 4 weeks the final bodyweights were 898, 867, 647, 563 and 153 g from the initial values of 68, 72, 65, 68 and 65 g. That gave yields of 188, 170, 122, 106 and 30 kg/m<sup>2</sup> pool. Efficiency ratio [**feed** eaten:gain] was 2.1, 2.1, 3.3, 3.6 and 12:1. The carp less

than a year old and weighing initially 0.5 g ate diets 12-75 or K110-nov each stored for 1 to 4 weeks. Bodyweight at end of trial was 102 and 20 g. Analysis of blood showed no significant difference between the different diets.

CC MM120 Aquaculture (Animals)  
ST carp **feeding**; balanced **feeds**; warm water

L96 ANSWER 29 OF 31 HCAPLUS COPYRIGHT 2002 ACS DUPLICATE 2  
AN 1978:73407 HCAPLUS  
DN 88:73407

TI Performance of steers fed crop residues supplemented with nonprotein nitrogen, minerals, protein and monensin

AU Oltjen, R. R.; Dinius, D. A.; Goering, H. K.

CS Nutr. Inst., ARS, Beltsville, Md., USA

SO J. Anim. Sci. (1977), 45(6), 1442-52

CODEN: JANSAG; ISSN: 0021-8812

DT Journal

LA English

CC 18-3 (Animal Nutrition)

AB Research was conducted to test nonprotein N (NPN)-protein supplements in a mineral mixt. for growing steers fed crop residues ad libitum.

Supplements contg. 7.5% NaCl, 10% dicalcium **phosphate**, 2.5%

K<sub>2</sub>CO<sub>3</sub>, 2% **MgSO<sub>4</sub>**, 1% elemental S plus trace minerals,

**molasses** and corn meal were readily consumed when combined with N

sources to formulate 100% crude protein equiv. (CPE) mixts.

**Cottonseed** hulls were readily consumed (3.1% of body wt.

(BW)/day), but chopped straw (2.0% BW) and corn stover (1.4% BW) were very poorly consumed. Increasing N intake by the steers markedly increased

**cottonseed** hull intake. Type of supplement and **cottonseed**

hull intake (percent BW) were as follows: neg. control (no supplemental

nitrogen source), 2.2% restricted 50% crude protein soybean meal control,

2.7%; and 100% CPE supplements fed free choice, 3.1%. Growing steers

gained an av. of 0.54 kg daily during 140-day trials when fed

**cottonseed** hulls free choice plus either biuret [108-19-0] or

urea [57-13-6] 100% CPE supplements. Replacing 20% of the NPN with fish

meal or soybean meal N increased gains by 20%. Treating the soybean meal

protein with 0.6% H<sub>2</sub>CO did not improve steer performance. Ruminant NH<sub>3</sub>

concns. averaged 10-20 mg NH<sub>3</sub>-N/100 mL of ruminal fluid for steers fed the

100% CPE supplements. Monensin [17090-79-8] addn. to the supplement

resulted in a 1.9 acetate/propionate ratio compared to a 5.0 ratio for

control steers but reduced supplement and **cottonseed** hull intake

and steer performance.

ST cattle **feed** protein substitute; mineral nitrogen **feed**

cattle

IT Cattle

(**feeding** expt. on, with minerals, proteins and protein substitutes)

IT Soybean meal

Straw

(**feeding** expt. with, on cattle)

IT Proteins

RL: BAC (Biological activity or effector, except adverse); BIOL

(Biological study)

(**feeding** expt. with, on cattle)

IT Mineral elements

RL: BAC (Biological activity or effector, except adverse); BIOL

(Biological study)

(**feeding** expt. with, on cattle, proteins and protein

substitutes in relation to)

IT **Cottonseed**

(hulls, **feeding** expt. with, on cattle)  
 IT Corn  
 Fish  
 (meal, **feeding** expt. with, on cattle)  
 IT 57-13-6, biological studies 108-19-0 17090-79-8  
 RL: BAC (Biological activity or effector, except adverse); BIOL  
 (Biological study)  
 (**feeding** expt. with, on cattle)

L96 ANSWER 30 OF 31 HCAPLUS COPYRIGHT 2002 ACS  
 AN 1969:499403 HCAPLUS  
 DN 71:99403

~~TI- Ruminant **feeding**~~  
 IN Ensor, William L.; Shaw, Joseph C.  
 PA Quaker Oats Co.  
 SO U.S., 10 pp.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC A61K; A23K  
 NCL 424095000  
 CC 10 (Animal Nutrition)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3458625	A	19690729	US 1963-274843	19630422
	NL 6403068	A	19641023	NL 1964-3068	19640323
PRAI	US 1963-274843		19630422		

AB Improved milk production is obtained from lactating dairy cows by **feeding** nonoxidized unsatd. material in nonglyceride form which consists of unsatd. free C14-24 fatty acids. Also included in the **feed** are hydrolyzed animal unsatd. fats, hydrolyzed marine and plant oils, alcs. derived from C14-24 unsatd. fatty acids, and lower alkyl esters of C14-24 unsatd. fatty acids. The amt. of the unsatd. material fed should be sufficient to provide 0.7-24.4 iodine value units/lb. of **feed**. Thus, **feeding** trials were conducted with steers and a mixt. of unsatd. fatty acids derived from **cottonseed** and soybean. The fatty acids (satd. acids 29.7, oleic acid 24.1, linoleic acid 41.9, and linolenic acid 4.4) were fed to a group of steers with a comparable group serving as a control. The unsatd. fatty acids were stabilized against oxidn. with butylated hydroxytoluene. Five percent of the unsatd. fatty acid mixt. was incorporated into a protein **feed** concn. to supply 24 iodine value units of added unsatd. materials/lb. of conc. The conc. was fed at the rate of 3 lb./head/day. The remainder of the ration was cracked shelled corn, chopped hay, and long hay. The control group was also fed a 32% crude protein supplement at the rate of 3 lb./head/day, without the incorporation of the unsatd. fatty acids. The protein conc. used for the beef trials contained soybean meal, linseed meal, urea, **molasses**, dehydrated alfalfa meal, defluorinated **phosphate**, limestone, NaCl, vitamin D as activated plant sterol, aureomycin, Stilbosol (stilbestrol), MnO, FeCO<sub>3</sub>, CuO, ZnO, CoCO<sub>3</sub>, KI, and **MgO**. The cattle receiving the unsatd. fatty acids gained 0.23 lb./day faster and required 56 lb. less **feed**/100 lb. of gain. The carcass grades were also improved; the controls had a grading score of 2.81 and the treated group 2.69. Lactating dairy cows receiving glycerides of animal or vegetable fat did not significantly respond with increased milk production, whereas cows receiving a comparable amt. of free fatty acids of tall oil or soybean oil showed marked increase in milk production.

ST cows lactation **feeds**; lactation cows **feeds**;

L24 ANSWER 4 OF 7 USPATFULL  
 AN 96:85133 USPATFULL  
 TI Epoxysuccinic acid derivatives  
 IN Tsubotani, Shigetoshi, Kawanishi, Japan  
 Masayuki, Takizawa, Kobe, Japan  
 Mikio, Shirasaki, Nishinomiya, Japan  
 Fujisawa, Yukio, Kobe, Japan  
 PA Takeda Chemical Industries, Ltd., Osaka, Japan (non-U.S. corporation)  
 PI US 5556853 19960917  
 AI US 1994-330833 19941027 (8)  
 PRAI JP 1993-272806 19931029  
 JP 1993-272835 19931029  
 JP 1994-186165- 19940808  
 DT Utility  
 FS Granted  
 LN.CNT 4712  
 INCL INCLM: 514/231.500  
 INCLS: 514/227.800; 514/252.000; 514/475.000; 544/584.000; 544/146.000;  
 544/147.000; 544/374.000; 549/548.000; 549/549.000  
 NCL NCLM: 514/231.500  
 NCLS: 514/227.800; 514/254.100; 514/475.000; 544/058.400; 544/146.000;  
 544/147.000; 544/374.000; 549/548.000; 549/549.000  
 IC [6]  
 ICM: A61K031-535  
 ICS: C07D413-12  
 EXF 544/147; 544/374; 549/548; 549/549; 514/231.5  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L24 ANSWER 5 OF 7 EUROPATFULL COPYRIGHT 2002 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 1213027 EUROPATFULL ED 20020619 EW 200224 FS OS  
 TIEN Liver function protecting or improving agent.  
 TIDE Mittel fuer den Schutz oder die Verbesserung der Leberfunktion.  
 TIFR Agent pour la protection ou l'amelioration de la fonction hepatique.  
 IN Nakagiri, Ryusuke, Tsukuba Research Laboratories, Kyowa Hakko Kogyo Co.,  
 Ltd., 2, Miyukigaoka, Tsukuba-shi, Ibaraki 305-0841, JP;  
 Kamiya, Toshikazu, Tsukuba Research Laboratories, Kyowa Hakko Kogyo Co.,  
 Ltd., 2, Miyukigaoka, Tsukuba-shi, Ibaraki 305-0841, JP;  
 Hashizume, Erika, Tsukuba Research Laboratories, Kyowa Hakko Kogyo  
 Co., Ltd., 2, Miyukigaoka, Tsukuba-shi, Ibaraki 305-0841, JP;  
 Sakai, Yasushi, Foods & Liquors Research Lab., Kyowa Hakko Kogyo Co.,  
 Ltd., 4041, Ami, Ami-machi, Inashiki-gun, Ibaraki 300-0398, JP;  
 Kayahashi, Shun, Tsukuba Research Laboratories, Kyowa Hakko Kogyo Co.,  
 Ltd., 2, Miyukigaoka, Tsukuba-shi, Ibaraki 305-0841, JP  
 PA KYOWA HAKKO KOGYO CO., LTD., 6-1, Ohtemachi 1-chome, Chiyoda-ku, Tokyo  
 100-8185, JP  
 SO Wila-EP2-2002-H24-T1b  
 DS R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE;  
 R IT; R LI; R LU; R MC; R NL; R PT; R SE; R TR; R AL; R LT; R LV; R MK;  
 R RO; R SI  
 PIT EPA2 EUROPATFULL PATENTANMELDUNG  
 PI EP 1213027 A2 20020612  
 OD 20020612  
 AI EP 2001-129254 20011211  
 PRAI JP 2000-2000375510 20001211  
 IC ICM A61K035-78  
 ICS A23L001-00 A23L002-00 A61P001-16

L24 ANSWER 6 OF 7 EUROPATFULL COPYRIGHT 2002 WILA



IN Tsubotani, Shigetoshi, 23-5, Tadain 2-chome, Kawawisaki, Hyogo 650-01, JP;  
Takizawa, Masayuki, 1-1-709, Shinoharaobanoyamacho chome, Nada-ku, Kobe, Hyogo 675, JP;  
Shirasaki, Mikio, 1-6-101, Minamikoshien 3-chome, Nishinomiya, Hyogo 663, JP;  
Fujisawa, Yukio, 1-31-104, Mikagenakamachi 4-chome, Higashinada-ku, Kobe, Hyogo 658, JP  
PA Takeda Chemical Industries, Ltd., 1-1 Doshomachi 4-chome, Chuo-ku, Osaka-shi, Osaka 541, JP  
SO Wila-EPZ-1995-H22-T1a  
DS R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IE; R IT; R LI; R LU; R NL; R PT; R SE  
PIT EPA1 EUROPÄISCHE PATENTANMELDUNG  
PI EP 655447 A1 19950531  
OD 19950531  
AI EP 1994-307984 19941028  
PRAI JP 1993-272806 19931029  
----- JP 1993-272835 ----- 19931029 -----  
JP 1994-186165 19940808  
IC ICM C07D303-48  
ICS C07D405-12 A61K031-335

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 655447 EUROPATFULL ED 19991212 EW 199522 FS OS STA B  
TIEN Epoxysuccinic acid derivatives.  
TIDE Derivate der Epoxybernsteinsaeure.  
TIFR Derives de l'acide epoxysuccinique.

=> s l1 and cow and (milk fever or urinary calculi)  
L26 10 L1 AND COW AND (MILK FEVER OR URINARY CALCULI)

=> d 1 - 10

'-' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):ignore

'IGNORE' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid in at least one of the files. Refer to file specific help messages or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):end

=> d l26 1-10

L26 ANSWER 1 OF 10 USPATFULL

AN 2002:185317 USPATFULL

TI Flowable **cottonseed** and method for its preparation

IN Summer, Paul, Oskaloosa, IA, UNITED STATES

Yamamoto, Koryu, Ottumwa, IA, UNITED STATES

PA Ajinomoto U.S.A., Inc., New York, NY, UNITED STATES, 10020 (U.S. corporation)

PI US 2002098226 A1 20020725

AI US 2001-768623 A1 20010125 (9)

DT Utility

FS APPLICATION

LN.CNT 499

INCL INCLM: 424/438.000

NCL NCLM: 424/438.000

IC [7]

ICM: A23K001-18

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L26 ANSWER 2 OF 10 USPATFULL

AN 2002:85564 USPATFULL

TI Esters of vitamin D3 and uses thereof

IN Reddy, Satyanarayana G., Barrington, RI, UNITED STATES

Sasso, Gino John, Rutherford, NJ, UNITED STATES

PI US 2002045606 A1 20020418

AI US 2000-728933 A1 20001201 (9)

PRAI US 1999-168588P 19991202 (60)

DT Utility

FS APPLICATION

LN.CNT 2191

INCL INCLM: 514/167.000

INCLS: 552/653.000

NCL NCLM: 514/167.000

NCLS: 552/653.000

IC [7]

ICM: A61K031-593

ICS: C07C401-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L26 ANSWER 3 OF 10 USPATFULL

AN 2001:110025 USPATFULL

TI 3-EPI COMPOUNDS OF VITAMIN D3 AND USES THEREOF

IN REDDY, SATYANARAYANA G., BARRINGTON, RI, United States

USKOKOVIC, MILAN, UPPER MONTCLAIR, NJ, United States  
PA WOMEN AND INFANTS HOSPITAL (U.S. corporation)  
PI US 2001007907 A1 20010712  
AI US 1998-80026 A1 19980515 (9)  
PRAI US 1997-46643P 19970516 (60)  
DT Utility  
FS APPLICATION  
LN.CNT 3161  
INCL INCLM: 552/653.000  
NCL NCLM: 552/653.000  
IC [7]  
ICM: C07C041-00  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L26 ANSWER 4 OF 10 USPATFULL  
AN 2000:125089 USPATFULL  
TI Cyclic ether vitamin D3 compounds and uses thereof  
IN Reddy, Satayanarayana G., Barrington, RI, United States  
PA Woman and Infants Hospital, Providence, RI, United States (U.S. corporation)  
PI US 6121312 20000919  
AI US 1999-410223 19990930 (9)  
RLI Division of Ser. No. US 1998-79942, filed on 15 May 1998  
PRAI US 1997-46690P 19970516 (60)  
DT Utility  
FS Granted  
LN.CNT 2438  
INCL INCLM: 514/451.000  
INCLS: 549/416.000; 549/417.000; 549/356.000; 549/428.000; 514/460.000  
NCL NCLM: 514/451.000  
NCLS: 514/460.000; 549/356.000; 549/416.000; 549/417.000; 549/428.000  
IC [7]  
ICM: A61K031-351  
ICS: C07D309-04  
EXF 514/451; 514/460; 549/356; 549/416; 549/417; 552/653  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L26 ANSWER 5 OF 10 USPATFULL  
AN 2000:102327 USPATFULL  
TI Cyclic ether vitamin D3 compounds, 1.alpha.(OH) 3-epi-vitamin D3 compounds and uses thereof  
IN Reddy, Satayanarayana G., Barrington, RI, United States  
PA Women and Infants Hospital, Providence, RI, United States (U.S. corporation)  
PI US 6100294 20000808  
AI US 1998-79942 19980515 (9)  
PRAI US 1997-46690P 19970516 (60)  
DT Utility  
FS Granted  
LN.CNT 2551  
INCL INCLM: 514/451.000  
INCLS: 514/460.000; 549/416.000; 552/653.000  
NCL NCLM: 514/451.000  
NCLS: 514/460.000; 549/416.000; 552/653.000  
IC [7]  
ICM: A61K031-35  
ICS: C07C401-00; C07D309-04  
EXF 549/416; 514/460; 514/451; 552/653  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L26 ANSWER 6 OF 10 USPATFULL  
AN 2000:9897 USPATFULL

TI 3-EPI vitamin D.sub.2 compounds and uses thereof  
IN Reddy, Satayanarayana G., Barrington, RI, United States  
PA Women and Infants Hospital, Providence, RI, United States (U.S.  
corporation)  
PI US 6017908 20000125  
AI US 1998-79838 19980515 (9)  
PRAI US 1997-46641P 19970516 (60)  
DT Utility  
FS Granted  
LN.CNT 2353  
INCL INCLM: 514/167.000  
INCLS: 552/653.000  
NCL NCLM: 514/167.000  
NCLS: 552/653.000  
IC

9 FILES SEARCHED...  
L25 12 L22 AND GLUTAMIC ACID

=> d 1-12

L25 ANSWER 1 OF 12 USPATFULL

AN 2002:205917 USPATFULL

TI Liver function protecting or improving agent

IN Nakagiri, Ryusuke, Tsukuba-shi, JAPAN

Kamiya, Toshikazu, Tsukuba-shi, JAPAN

Hashizume, Erika, Tsukuba-shi, JAPAN

Sakai, Yasushi, Inashiki-gun, JAPAN

Kayahashi, Shun, Tsukuba-shi, JAPAN

PI — US 2002110605 — A1 — 20020815

AI US 2001-10154 A1 20011210 (10)

PRAI JP 2000-375510 20001211

DT Utility

FS APPLICATION

LN.CNT 1786

INCL INCLM: 424/725.000

NCL NCLM: 424/725.000

IC [7]

ICM: A61K035-78

L25 ANSWER 2 OF 12 USPATFULL

AN 2002:185317 USPATFULL

TI Flowable **cottonseed** and method for its preparation

IN Summer, Paul, Oskaloosa, IA, UNITED STATES

Yamamoto, Koryu, Ottumwa, IA, UNITED STATES

PA Ajinomoto U.S.A., Inc., New York, NY, UNITED STATES, 10020 (U.S. corporation)

PI US 2002098226 A1 20020725

AI US 2001-768623 A1 20010125 (9)

DT Utility

L25 ANSWER 4 OF 12 USPATFULL  
AN 96:85133 USPATFULL  
TI Epoxysuccinic acid derivatives  
IN Tsubotani, Shigetoshi, Kawanishi, Japan  
Masayuki, Takizawa, Kobe, Japan  
Mikio, Shirasaki, Nishinomiya, Japan  
Fujisawa, Yukio, Kobe, Japan  
PA Takeda Chemical Industries, Ltd., Osaka, Japan (non-U.S. corporation)  
PI US 5556853 19960917  
AI US 1994-330833 19941027 (8)  
PRAI JP 1993-272806 19931029  
JP 1993-272835 19931029  
~~JP 1994-186165 19940808~~  
DT Utility  
FS Granted  
LN.CNT 4712  
INCL INCLM: 514/231.500  
INCLS: 514/227.800; 514/252.000; 514/475.000; 544/584.000; 544/146.000;  
544/147.000; 544/374.000; 549/548.000; 549/549.000  
NCL NCLM: 514/231.500  
NCLS: 514/227.800; 514/254.100; 514/475.000; 544/058.400; 544/146.000;  
544/147.000; 544/374.000; 549/548.000; 549/549.000  
IC [6]  
ICM: A61K031-535  
ICS: C07D413-12  
EXF 544/147; 544/374; 549/548; 549/549; 514/231.5  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L25 ANSWER 5 OF 12 USPATFULL  
AN 95:6020 USPATFULL  
TI Batch process for fatty acid alkaline earth metal salt production  
IN Vinci, Alfredo, Dayton, NJ, United States  
Cummings, Kenneth R., Skillman, NJ, United States  
Lajoie, M. Stephen, Basking Ridge, NJ, United States  
PA Church & Dwight Co., Inc., Princeton, NJ, United States (U.S.  
corporation)  
PI US 5382678 19950117  
AI US 1994-285432 19940804 (8)  
RLI Continuation of Ser. No. US 1993-77090, filed on 16 Jun 1993, now  
abandoned  
DT Utility  
FS Granted  
LN.CNT 331  
INCL INCLM: 554/156.000  
INCLS: 426/072.000; 426/074.000; 426/656.000; 426/658.000; 426/807.000  
NCL NCLM: 554/156.000  
NCLS: 426/072.000; 426/074.000; 426/656.000; 426/658.000; 426/807.000  
IC [6]  
ICM: A23K001-00  
EXF 554/156; 426/72; 426/74; 426/656; 426/658; 426/807  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L25 ANSWER 6 OF 12 USPATFULL  
AN 89:92484 USPATFULL  
TI Combinations having synergistic growth hormone releasing activity and  
methods for use thereof  
IN Bowers, Cyril Y., New Orleans, LA, United States  
Momany, Frank A., Concord, MA, United States  
Chang, Ching H., Kingsport, TN, United States  
Cody, Wayne, Kingsport, TN, United States  
Hubbs, John C., Gray, TN, United States

Foster, Charles H., Kingsport, TN, United States  
PA Eastman Kodak Company, Rochester, NY, United States (U.S. corporation)  
PI US 4880778 19891114  
AI US 1987-37275 19870410 (7)  
RLI Continuation-in-part of Ser. No. US 1986-861968, filed on 12 May 1986,  
now abandoned  
DT Utility  
FS Granted  
LN.CNT 2539  
INCL INCLM: 514/012.000  
NCL NCLM: 514/012.000  
IC [4]  
ICM: H61K037-43  
EXF 514/12  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L25 ANSWER 7 OF 12 USPATFULL  
AN 72:42842 USPATFULL  
TI NUTRIENT RATION FOR INCREASING GROWTH OF LIVESTOCK AND POULTRY  
IN Hamada, Yoshio, Tokyo, Japan  
Yoshino, Motohisa, Suita, Japan  
PA Takeda Chemical Industries, Ltd., Osaka, Japan  
PI US 3686392 19720822  
AI US 1966-523047 19660126 (4)  
PRAI JP 1965-4763 19650127  
JP 1965-6096 19650203  
DT Utility  
FS Granted  
LN.CNT 671  
INCL INCLM: 424/016.000  
INCLS: 099/002.000G; 424/180.000; 099/004.000  
NCL NCLM: 424/442.000  
NCLS: 514/047.000; 514/048.000; 514/051.000; 514/052.000  
IC [1]  
ICM: A23K001-00  
EXF 099/140N; 099/2; 099/2G; 099/4; 099/16; 099/9; 195/28N

L25 ANSWER 8 OF 12 EUROPATFULL COPYRIGHT 2002 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 1213027 EUROPATFULL ED 20020619 EW 200224 FS OS  
TIEN Liver function protecting or improving agent.  
TIDE Mittel fuer den Schutz oder die Verbesserung der Leberfunktion.  
TIFR Agent pour la protection ou l'amelioration de la fonction hepatique.  
IN Nakagiri, Ryusuke, Tsukuba Research Laboratories, Kyowa Hakko Kogyo Co.,  
Ltd., 2, Miyukigaoka, Tsukuba-shi, Ibaraki 305-0841, JP;  
Kamiya, Toshikazu, Tsukuba Research Laboratories, Kyowa Hakko Kogyo Co.,  
Ltd., 2, Miyukigaoka, Tsukuba-shi, Ibaraki 305-0841, JP;  
Hashizume, Erika, Tsukuba Research Laboratories, Kyowa Hakko Kogyo  
Co., Ltd, 2, Miyukigaoka, Tsukuba-shi, Ibaraki 305-0841, JP;  
Sakai, Yasushi, Foods & Liquors Research Lab., Kyowa Hakko Kogyo Co.,  
Ltd., 4041, Ami, Ami-machi, Inashiki-gun, Ibaraki 300-0398, JP;  
Kayahashi, Shun, Tsukuba Research Laboratories, Kyowa Hakko Kogyo Co.,  
Ltd., 2, Miyukigaoka, Tsukuba-shi, Ibaraki 305-0841, JP  
PA KYOWA HAKKO KOGYO CO., LTD., 6-1, Ohtemachi 1-chome, Chiyoda-ku, Tokyo  
100-8185, JP  
SO Wila-EP2-2002-H24-T1b  
DS R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE;  
R IT; R LI; R LU; R MC; R NL; R PT; R SE; R TR; R AL; R LT; R LV; R MK;  
R RO; R SI  
PIT EPA2 EUROPAEISCHE PATENTANMELDUNG



PI EP 1213027 A2 20020612  
OD 20020612  
AI EP 2001-129254 20011211  
PRAI JP 2000-2000375510 20001211  
IC ICM A61K035-78  
ICS A23L001-00 A23L002-00 A61P001-16


L25 ANSWER 9 OF 12 EUROPATFULL COPYRIGHT 2002 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 1186293 EUROPATFULL ED 20020321 EW 200211 FS OS  
TIEN Intermittent administration of a growth hormone secretagogue.  
~~TIDE~~ Intermittierende Verabreichung eines Wachstumshormon-  
sekretionsfoerderers.

FS       Granted  
LN.CNT 749  
INCL     INCLM: 424/442.000  
NCL      NCLM: 424/442.000  
IC       [6]  
          ICM: A23K001-18  
EXF      424/442  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23   ANSWER 9 OF 12   USPATFULL  
AN     95:16234   USPATFULL  
TI     Process for production of high purity fatty acid salt products  
IN     Vinci, Alfredo, Dayton, NJ, United States  
       Forrest, Ronald L., Cranbury, NJ, United States  
PA     Church & Dwight Co., Inc., Princeton, NJ, United States (U.S.  
       corporation)  
PI     US 5391787                   19950221  
AI     US 1993-52264               19930423 (8)  
DT     Utility  
FS     Granted  
LN.CNT 571  
INCL   INCLM: 554/156.000  
          INCLS: 424/074.000; 424/807.000  
NCL     NCLM: 554/156.000  
          NCLS: 426/074.000; 426/807.000  
IC       [6]  
          ICM: C07C051-00  
EXF     426/74; 554/156; 554/807  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.



L23   ANS

23 ANSWER 6 OF 12 USPATFULL

AN 97:101501 USPATFULL  
 TI Extruded animal feed nuggets for ruminants  
 IN Lanter, Kent J., Waterloo, IL, United States  
 Weakley, David C., Eureka, MO, United States  
 PA Purina Mills, Inc., St. Louis, MO, United States (U.S. corporation)  
 PI US 5683739 19971104  
 AI US 1996-680710 19960711 (8)  
 RLI Division of Ser. No. US 1995-421234, filed on 13 Apr 1995, now patented,  
 Pat. No. US 5540932  
 DT Utility  
 FS Granted  
 LN.CNT 734  
 INCL-- INCLM: 426/623.000  
 INCLS: 426/656.000; 426/608.000; 426/516.000; 426/807.000; 424/438.000;  
 424/442.000  
 NCL NCLM: 426/623.000  
 NCLS: 424/438.000; 424/442.000; 426/516.000; 426/608.000; 426/656.000;  
 426/807.000  
 IC [6]  
 ICM: A23K001-18  
 ICS: A23K001-16  
 EXF 426/623; 426/656; 426/608; 426/516; 426/807; 424/438; 424/442  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 7 OF 12 USPATFULL

AN 96:85133 USPATFULL  
 TI Epoxysuccinic acid derivatives  
 IN Tsubotani, Shigetoshi, Kawanishi, Japan  
 Masayuki, Takizawa, Kobe, Japan  
 Mikio, Shirasaki, Nishinomiya, Japan  
 Fujisawa, Yukio, Kobe, Japan  
 PA Takeda Chemical Industries, Ltd., Osaka, Japan (non-U.S. corporation)  
 PI US 5556853 19960917  
 AI US 1994-330833 19941027 (8)  
 PRAI JP 1993-272806 19931029  
 JP 1993-272835 19931029  
 JP 1994-186165 19940808  
 DT Utility  
 FS Granted  
 LN.CNT 4712  
 INCL INCLM: 514/231.500  
 INCLS: 514/227.800; 514/252.000; 514/475.000; 544/584.000; 544/146.000;  
 544/147.000; 544/374.000; 549/548.000; 549/549.000  
 NCL NCLM: 514/231.500  
 NCLS: 514/227.800; 514/254.100; 514/475.000; 544/058.400; 544/146.000;  
 544/147.000; 544/374.000; 549/548.000; 549/549.000  
 IC [6]  
 ICM: A61K031-535  
 ICS: C07D413-12  
 EXF 544/147; 544/374; 549/548; 549/549; 514/231.5  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 8 OF 12 USPATFULL

AN 96:67756 USPATFULL  
 TI Extruded animal feed nuggets for ruminants  
 IN Lanter, Kent J., Waterloo, IL, United States  
 Weakley, David C., Eureka, MO, United States  
 PA Purina Mills, Inc., St. Louis, MO, United States (U.S. corporation)  
 PI US 5540932 19960730  
 AI US 1995-421234 19950413 (8)  
 DT Utility

=> s 19 and cow  
L22 94 L9 AND COW

=> s 110 and cow  
L23 12 L10 AND COW

=> s 111 and cow  
L24 7 L11 AND COW

=> d 1-7

L24 ANSWER 1 OF 7 USPATFULL

AN 2002:205917 -USPATFULL

TI Liver function protecting or improving agent

IN Nakagiri, Ryusuke, Tsukuba-shi, JAPAN

Kamiya, Toshikazu, Tsukuba-shi, JAPAN

Hashizume, Erika, Tsukuba-shi, JAPAN

Sakai, Yasushi, Inashiki-gun, JAPAN

Kayahashi, Shun, Tsukuba-shi, JAPAN

PI US 2002110605 A1 20020815

AI US 2001-10154 A1 20011210 (10)

PRAI JP 2000-375510 20001211

DT Utility

FS APPLICATION

LN.CNT 1786

INCL INCLM: 424/725.000

NCL NCLM: 424/725.000

IC [7]

ICM: A61K035-78

L24 ANSWER 2 OF 7 USPATFULL

AN 2002:185317 USPATFULL

TI Flowable **cottonseed** and method for its preparation

IN Summer, Paul, Oskaloosa, IA, UNITED STATES

Yamamoto, Koryu, Ottumwa, IA, UNITED STATES

PA

L21 ANSWER 2 OF 6 USPATFULL  
AN 2002:185317 USPATFULL  
TI Flowable **cottonseed** and method for its preparation  
IN Summer, Paul, Oskaloosa, IA, UNITED STATES  
Yamamoto, Koryu, Ottumwa, IA, UNITED STATES  
PA Ajinomoto U.S.A., Inc., New York, NY, UNITED STATES, 10020 (U.S.  
corporation)  
PI US 2002098226 A1 20020725  
AI US 2001-768623 A1 20010125 (9)  
DT Utility  
FS APPLICATION  
LN.CNT 499  
INCL- -INCLM: 424/438.000  
NCL NCLM: 424/438.000  
IC [7]  
ICM: A23K001-18  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 3 OF 6 USPATFULL  
AN 91:100392 USPATFULL  
TI Use of methylsulfonylmethane to enhance diet of an animal  
IN Herschler, Robert J., 3206 NW. Second Ave., Camas, WA, United States  
98607 ✓  
PI US 5071878 19911210  
AI US 1991-654856 19910206 (7)  
RLI Continuation-in-part of Ser. No. US 1990-564946, filed on 9 Aug 1990  
which is a division of Ser. No. US 1989-385117, filed on 26 Jul 1989,  
now patented, Pat. No. US 4973605 which is a division of Ser. No. US  
1986-878948, filed on 26 Jun 1986, now patented, Pat. No. US 4863748  
which is a continuation-in-part of Ser. No. US 1985-727989, filed on 29  
Apr 1985, now patented, Pat. No. US 4616039 Ser. No. Ser. No. US  
1984-601771, filed on 17 Apr 1984, now patented, Pat. No. US 4559329  
Ser. No. Ser. No. US 1984-584354, filed on 28 Feb 1984, now patented,  
Pat. No. US 4568547 And Ser. No. US 1982-418110, filed on 14 Sep 1982,  
now patented, Pat. No. US 4514421, each which is a continuation-in-part  
of Ser. No. US 1981-277592, filed on 26 Jun 1981, now patented, Pat. No.  
US 4477469 which is a division of Ser. No. US 1979-71068, filed on 6 Aug  
1979, now patented, Pat. No. US 4296130  
DT Utility  
FS Granted  
LN.CNT 1458  
INCL INCLM: 514/711.000  
NCL NCLM: 514/711.000  
IC [5]  
ICM: A61K031-10  
EXF 514/711; 426/72  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 4 OF 6 USPATFULL  
AN 90:25800 USPATFULL  
TI Use of Methylsulfonylmethane to treat parasitic infections  
IN Herschler, Robert J., 3080 N.W. 8th Ave., Camas, WA, United States  
98607 ✓  
PI US 4914135 19900403  
AI US 1989-385116 19890726 (7)  
RLI Division of Ser. No. US 1987-878948, filed on 26 Jun 1987, now patented,  
Pat. No. US 4863748 which is a continuation-in-part of Ser. No. US  
1985-727989, filed on 29 Apr 1985, now patented, Pat. No. US 4616039  
Ser. No. Ser. No. US 1984-601771, filed on 17 Apr 1984, now patented,  
Pat. No. US 4559329 Ser. No. Ser. No. US 1984-589354, filed on 18 Feb  
1984, now patented, Pat. No. US 4568547 And Ser. No. US 1982-418110,

filed on 14 Sep 1982, now patented, Pat. No. US 4514921 which is a continuation-in-part of Ser. No. US 1981-277592, filed on 26 Jun 1981, now patented, Pat. No. US 4477469 which is a division of Ser. No. US 1979-71068, filed on 6 Aug 1979, now patented, Pat. No. US 4296130

DT Utility  
FS Granted

LN.CNT 1465

INCL INCLM: 514/711.000

INCLS: 424/439.000

NCL NCLM: 514/711.000

NCLS: 424/439.000

IC [4]

ICM: A61K031-10

EXF 514/711; 424/439

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 5 OF 6 USPATFULL

AN 89:74008 USPATFULL

TI Dietary products and uses comprising methylsulfonylmethane

IN Herschler, Robert J., 3080 NW. 8th Ave., Camas, WA, United States 98607

PI US 4863748 19890905

AI US 1986-878948 19860626 (6)

RLI Division of Ser. No. US 1985-727989, filed on 29 Apr 1985, now patented, Pat. No. US 4616039 And a continuation-in-part of Ser. No. US 1984-601771, filed on 17 Apr 1984, now patented, Pat. No. US 4559329 And a continuation-in-part of Ser. No. US 1984-584354, filed on 28 Feb 1984, now patented, Pat. No. US 4568547 And a continuation-in-part of Ser. No. US 1982-418110, filed on 14 Sep 1982, now patented, Pat. No. US 4514421 And a continuation-in-part of Ser. No. US 1981-277592, filed on 26 Jun 1981, now patented, Pat. No. US 4477469 which is a division of Ser. No. US 1979-71068, filed on 6 Aug 1979, now patented, Pat. No. US 4296130

DT Utility

FS Granted

LN.CNT 1494

INCL INCLM: 426/072.000

INCLS: 426/074.000; 426/520.000; 426/580.000; 426/623.000; 426/630.000;  
426/636.000; 426/646.000; 426/648.000; 426/805.000; 426/807.000;  
514/711.000

NCL NCLM: 426/072.000

NCLS: 426/074.000; 426/520.000; 426/580.000; 426/623.000; 426/630.000;  
426/636.000; 426/646.000; 426/648.000; 426/805.000; 426/807.000;  
514/711.000

IC [4]

ICM: A23K001-00

ICS: A23L001-30

EXF 426/74; 426/2; 426/72; 426/319; 426/535; 426/623; 426/630; 426/580;

426/560; 426/520; 426/636; 426/523; 426/807; 426/646; 426/648; 426/805;  
514/588; 514/711; 514/708

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L21 ANSWER 6 OF

11 FILES SEARCHED...  
L9 690 (CORN STEEP LIQUOR OR DISTILLERS SOLUBLES OR YEAST PASTE OR  
WHEY OR MOLASSES) AND L1

=> s l9 and (phosphoric acid )

8 FILES SEARCHED...

9 FILES SEARCHED...

L10 161 L9 AND (PHOSPHORIC ACID )

=> s (aluminum oxide or calcium carbonate or magnesium oxide) and l10

7 FILES SEARCHED...

9 FILES SEARCHED...

L11 86 (ALUMINUM OXIDE OR CALCIUM CARBONATE OR MAGNESIUM OXIDE) AND

L10

=> s l11 and l7

L12 3 L11 AND L7

=> s l10 and l7

L13 3 L10 AND L7

=> s l9 and l7

L14 3 L9 AND L7

=> s l11 and ketosis

L15 0 L11 AND KETOSIS

=> s l11 and milk fever

L16 3 L11 AND MILK FEVER

=> s l11 and urinary calculi

L17 3 L11 AND URINARY CALCULI

=> s l10 and urinary calculi

L18 3 L10 AND URINARY CALCULI

=> s l10 and milk fever

L19 3 L10 AND MILK FEVER

=> s l9 and milk fever

L20 3 L9 AND MILK FEVER

=> s l9 and calculi

L21 6 L9 AND CALCULI

=> d 1-6

L21 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2002 ACS

AN 2002:555965 CAPLUS

DN 137:108652

TI Phosphorus-containing **coating** materials for flowable  
**cottonseed**

IN Summer, Paul; Yamamoto, Koryu

PA Ajinomoto U.S.A., Inc., USA

SO U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002098226	A1	20020725	US 2001-768623	20010125

9 FILES SEARCHED...

L6 0 SEED COATING AND L4

=> s fermentation solubles and l4

L7 20 FERMENTATION SOLUBLES AND L4

=> s fermentation solubles and l1

L8 4 FERMENTATION SOLUBLES AND L1

=> d 1-4

L8 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS

AN 2002:555965 CAPLUS

DN 137:108652

TI Phosphorus-containing coating materials for flowable  
cottonseed

IN Summer, Paul; Yamamoto, Koryu

PA Ajinomoto U.S.A., Inc., USA

SO U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002098226	A1	20020725	US 2001-768623	20010125

L8 ANSWER 2 OF 4 USPATFULL

AN 2002:185317 USPATFULL

TI Flowable cottonseed and method for its preparation

IN Summer, Paul, Oskaloosa, IA, UNITED STATES

Yamamoto, Koryu, Ottumwa, IA, UNITED STATES

PA Ajinomoto U.S.A., Inc., New York, NY, UNITED STATES, 10020 (U.S.  
corporation)

PI US 2002098226 A1 20020725

AI US 2001-768623 A1 20010125 (9)

DT Utility

FS APPLICATION

LN.CNT 499

INCL INCLM: 424/438.000

NCL NCLM: 424/438.000

IC [7]

ICM: A23K001-18

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L8 ANSWER 3 OF 4 EUROPATFULL COPYRIGHT 2002 WILA

GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

AN 550493 EUROPATFULL ED 20010720 EW 199532 FS PS STA B

TIEN ANTHELMINTIC AND ANTICOCCIDAL 3-CARBAMOYL-4-HYDROXYCOUMARINS, METHOD OF  
USE AND COMPOSITIONS.

TIDE ANTHELMINTISCHE UND COCCIDIZIDE 3-CARBAMOYL-4-HYDROXYCUMARINE, IHRE  
VERWENDUNG UND ZUSAMMENSETZUNGEN.

TIFR 3-CARBAMOYL-4-HYDROXYCOUMARINES ANTHELMINTIQUES ET ANTICOCCIDIENNES,  
MODE D'EMPLOI ET COMPOSITIONS.

IN CLOTHIER, Michael, F., 5427 East Q Avenue, Kalamazoo, MI 49001, US;

LEE, Byung, Hyun, 7695 South 12th Street, Kalamazoo, MI 49002, US

PA THE UPJOHN COMPANY, 301 Henrietta Street, Kalamazoo, Michigan 49001, US

SO Wila-EPS-1995-H32-T1

DS R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IT; R LI; R LU;  
R NL; R SE



PIT EPB1 EUROPÄISCHE PATENTSCHRIFT (Internationale Anmeldung)

PI EP 550493 B1 19950809

OD 19930714

AI EP 1991-916189 19910924

PRAI US 1990-589934 19900928

RLI WO 91-US6750 910924 INTAKZ

WO 9206083 920416 INTPNR

REP EP 38427 A EP 241834 A

DE 2643428 A DE 2643476 A

DE 1214696 B US 3991204 A

REN CHIMIE THERAPEUTIQUE, vol. 2, no. 6, November 1967, (Paris, FR), L. FONTAINE et al.: "Etude experimentale des proprietes choleretiques de coumarines, indane diones et acyl indane diones apparentees aux anticoagulants oraux", pages 430-440; see table 7; compound 41 (cited in the application) CHEMICAL ABSTRACTS, vol. 67, no. 19, 6 November 1967, page 8532, abstract no. 90676k, (Columbus, Ohio, US), & JP,A,42004667 (TANABE SEIYAKU) 25 February 1967, see abstract (cited in the application)

IC ICM A61K031-35

ICS C07D311-46 C07D311-54 C07D405-12 C07D417-12

C07D417-14 C07F009-655

4 2 8000 Cotton seed (coarse coating)

12 FILES SEARCHED...

L2 3 CONDENSED GLUTAMIC ACID FERMENTATION SOLUBLES

=> d 1-3

L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS

AN 2002:555965 CAPLUS

DN 137:108652

TI Phosphorus-containing coating materials for flowable cottonseed

IN Summer, Paul; Yamamoto, Koryu

PA Ajinomoto U.S.A., Inc., USA

SO U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002098226	A1	20020725	US 2001-768623	20010125

L2 ANSWER 2 OF 3 USPATFULL

AN 2002:185317 USPATFULL

TI Flowable cottonseed and method for its preparation

IN Summer, Paul, Oskaloosa, IA, UNITED STATES

Yamamoto, Koryu, Ottumwa, IA, UNITED STATES

PA Ajinomoto U.S.A., Inc., New York, NY, UNITED STATES, 10020 (U.S. corporation)

PI US 2002098226 A1 20020725

AI US 2001-768623 A1 20010125 (9)

DT Utility

FS APPLICATION

LN.CNT 499

INCL INCLM: 424/438.000

NCL NCLM: 424/438.000

IC [7]

ICM: A23K001-18

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 3 OF 3 IFIPAT COPYRIGHT 2002 IFI

AN 10154585 IFIPAT;IFIUDB;IFICDB

TI FLOWABLE COTTONSEED AND METHOD FOR ITS PREPARATION

IN Summer Paul; Yamamoto Koryu

PA Ajinomoto U S A Inc

PI US 2002098226 A1 20020725

AI US 2001-768623 20010125

FI US 2002098226 20020725

DT Utility; Patent Application - First Publication

FS CHEMICAL

FS APPLICATION

CLMN 57

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